

FISHERY RESEARCH



MARKET SEGMENTATION, SATISFACTION, AND ACTIVITY PERSISTENCE OF IDAHO ANGLERS

Project F-73-R-16
Subproject VI, Study IV

By:

Nick Sanyal

and

William J. McLaughlin

IDFG 94-10
April 1994

TABLE OF CONTENTS

TABLE OF CONTENTS	ii
LIST OF TABLES	iv
LIST OF FIGURES.....	vi
ACKNOWLEDGMENTS	x
CHAPTER 1: EXECUTIVE SUMMARY.....	1
CHAPTER 2: INTRODUCTION.....	2
Limitations	3
Report Organization.....	3
CHAPTER 3: SURVEY RESEARCH METHODS	5
Questionnaire Administration and Computerization.....	8
Non-response Bias.....	10
CHAPTER 4: ANGLER PROFILES	12
Introduction	12
Age	12
Gender	12
Marital Status	14
Family Life Cycle.....	14
Employment.....	17
Income.....	17
Race	17
Angling History and Behavior.....	20
Expertise as an angler and interest in fishing	20

Kind of Fishing	22
Fishing Companions.....	24
Age of Initiation into fishing	26
Days Fished Per Year	28
Where Fished	29
CHAPTER 5: CENTRALITY AND VALUE OF FISHING.....	31
CHAPTER 6: ANGLER SEGMENTATION	34
Motivations (Desired Experiences).....	34
Market segmentation of active anglers	40
Market segment scales for inactive anglers.....	46
Segmentation Validation	50
CHAPTER 7: PERCEIVED AVAILABILITY OF DESIRED OPPORTUNITIES.....	57
CHAPTER 8: CONSUMPTIVENESS	86
CHAPTER 9: ACTIVITY PERSISTENCE.....	94
REFERENCES	101
APPENDICES.....	104

LIST OF TABLES

Table 1. Sample sizes and response rates.....	5
Table 2. Summary and comparison of instrument content.	6
Table 3. Racial composition of active anglers, inactive anglers and non-anglers.	20
Table 4. Satisfaction with fishing.....	32
Table 5. Importance of reasons for fishing in Idaho	38
Table 6. Factor composition and statistics for active anglers.	41
Table 7. Factor scale means for active angler types.....	44
Table 8. Relative levels of importance placed by the four active angler types on the seven reasons for fishing scales.	45
Table 9. Factor composition and statistics for inactive anglers.	46
Table 10. Factor scale means for inactive angler types	48
Table 11. Relative levels of importance placed by the four inactive angler types on the six reasons for fishing scales.	49
Table 12. Segment validation: Comparison of active angler types using salient behavioral, preference, and demographic variables...	51
Table 13. Segment validation: Comparison of inactive angler types using salient behavioral, preference, and demographic variables...	54

Table 14. Consumptive orientation scale item composition: active and inactive anglers combined.....	90
Table 15. Consumptiveness Scale means for active and inactive anglers	92
Table 16. Importance and rank ordering of items related to activity persistence and termination.....	94
Table 17. Variables included in the final stepwise Discriminant analysis.....	98
Table 18. Canonical Discriminant functions of active, inactive and non-anglers on reasons for activity persistence.....	98
Table 19. Final classification results showing the validity of activity persistence as predictor of angler group membership	99
Table 20. Mean scores for variables affecting activity persistence, by consumptive orientation (significant comparisons only)	100

LIST OF FIGURES

Figure 1. Age distributions of active, inactive and non-anglers.	13
Figure 2. Gender of active, inactive and non-anglers	14
Figure 3. Number of children of active, inactive and non-anglers.....	15
Figure 4. Mean ages of children living at home for each of the three sub- populations.	16
Figure 5. Employment status of active, inactive and non-anglers.....	18
Figure 6. Income distribution by category for active, inactive and non-anglers.	19
Figure 7. Self rating of expertise level of active and inactive anglers.	21
Figure 8. Interest levels of non-anglers	22
Figure 9. Kinds of fishing engaged in by active and inactive anglers.....	23
Figure 10. Diversity of the fishing experience for active and currently inactive anglers.....	24
Figure 11. Fishing companions of active and currently inactive anglers.....	25
Figure 12. Number of types of different fishing partners that active and currently inactive anglers fished with.	25
Figure 13. Age of initiation into fishing.....	26
Figure 14. Number of years fished by active and inactive anglers.....	21

Figure 15. Distribution of days spent fishing per year by active and inactive anglers.....	28
Figure 16. Frequency of use of types of fishing waters, for active and inactive anglers.....	29
Figure 17. Frequency of "having an enjoyable trip" at different types of fishing waters, for active and inactive anglers who have fished in each type of water.	30
Figure 18. Consequences of not being able to fish.	31
Figure 18A. Cumulative satisfaction scores for active and inactive anglers.....	33
Figure 19. Comparisons of factor scale means for the four types of active anglers.....	45
Figure 20. Comparisons of factor scale means for the four types of inactive anglers.....	50
Figure 21. Importance and availability of developing and using fishing skills.....	59
Figure 22. Importance and availability of reducing tensions.....	60
Figure 23. Importance and availability of being close to nature.....	61
Figure 24. Importance and availability of showing others.....	62
Figure 25. Importance and availability of excitement and stimulation.....	63
Figure 26. Importance and availability of catching trophy fish.....	64
Figure 27. Importance and availability of developing spiritual values	65

Figure 28. Importance and availability of competing against other anglers ...	66
Figure 29. Importance and availability of getting away from daily demands.....	67
Figure 30. Importance and availability of catching any fish	68
Figure 31. Importance and availability of being in natural settings.....	69
Figure 32. Importance and availability of experiencing tranquillity.....	70
Figure 33. Importance and availability of testing fishing abilities	71
Figure 34. Importance and availability of catching daily bag limits	72
Figure 35. Importance and availability of being alone while fishing.....	73
Figure 36. Importance and availability of sharing knowledge with others.....	74
Figure 37. Importance and availability of being with friends.....	75
Figure 38. Importance and availability of catching different kinds of fish.....	76
Figure 39. Importance and availability of learning about fishing waters.....	77
Figure 40. Importance and availability of being with family.....	78
Figure 41. Importance and availability of putting meat on the table	79
Figure 42. Importance and availability of seeing fish jump and rise	80
Figure 43. Importance and availability of testing and using equipment.....	81
Figure 44. Importance and availability of developing close friendships.....	82
Figure 45. Importance and availability of thinking about personal values	83
Figure 46. Importance and availability of bringing back pleasant memories	84

Figure 47. Importance and availability of learning about fish.....	85
Figure 48. Distribution of consumptive orientation scores	91
Figure 49. Satisfaction levels for low-, mid- and high-consumptive oriented anglers	93

ACKNOWLEDGMENTS

Many people contributed to the successful completion of this project. Their help and advice helped ensure that the data we collected and the interpretations we made aided the management of Idaho's anglers.

Connie Spofford and Steve Timpon of the State Tax Commission provided the database from which we drew our samples.

Julie Scanlin, Michelle Buclair, Al Van Vooren and Virgil Moore of Idaho Fish and Game reviewed the first draft of the report and made innumerable suggestions for improvement.

Tom McArthur of Idaho Fish and Game provided constant feed back and advice and helped us understand the managerial context of endeavor.

Mark Walker of the Department of Resource Recreation and Tourism managed survey administration and data entry. Randy Pitstick and Ed Krumpe reviewed drafts of the survey instrument.

Bjørn Kaltenborn, Ronny Meyer and Øystein Aas of the Norwegian Institute for Nature Research (Lillehammer) reviewed drafts of the survey instrument and made many suggestions that improved our analysis.

This study was supported entirely by Federal Aid in Fish Restoration funds.

CHAPTER 1: EXECUTIVE SUMMARY

On the basis of a series of literature analyses we concluded that this study must have two basic thrusts: (1) A statewide, multi-attribute, multi-measure, empirically-based segmentation of anglers to identify the broad range of angler experiences and markets offered in Idaho; and (2) a linking of these motivational segments to consumptive and other behaviors. This report describes survey research aimed at characterizing the different segments of the Idaho angler population, and provides statewide angler profiles in terms of demographics, angling history and behavior. It segments anglers based on desired experiences and examines the relationship between angler motivations and satisfaction. It examines the availability of desired settings and the centrality and value of fishing. It concludes with a look at consumptiveness and activity persistence.

A major finding is that traditional biological-based strategies of attracting and managing anglers and their resources have served very well to attract and retain "committed" anglers. However, with anglers who are using fishing to allow them to access other outdoor experiences such as experiencing nature and tranquillity, a more human science based approach must be tried.

No specific recommendations are offered. Those should best come from a conferencing of human and biological sciences-creating strategies that best serve the many goals that agency and public have for fishing.

CHAPTER 2: INTRODUCTION

Because little is known about the angling experiences desired by Idaho's anglers and how these preferences sustain the activity, the growing pressure and competition for the state's limited angling resources cannot be adequately addressed by managers. Furthermore, there is little data with which to gauge how specific angling regulations may affect the nature of the fishing opportunities that are currently provided, or how regulations may impact individual fishing experiences. This report describes three studies designed to provide data to compliment traditional biological management data by providing meaningful indicators of angler sentiment and motives. On the basis of a series of literature synopses (Sanyal and McLaughlin 1992a, b & c) we concluded that this study must have two basic thrusts: (1) A statewide, multi-attribute, multi-measure, empirically-based segmentation of anglers to identify the broad range of angler experiences and markets offered in Idaho; and (2) a linking of these motivational segments to consumptive orientation and activity persistence.

This report describes survey research aimed at characterizing the different segments of the Idaho angler population, specifically:

1. Statewide angler profiles in terms of demographics, angling history and behavior
2. Angler segmentation including motivations (desired experiences) and the relationship between angler motivations and satisfaction,
3. Availability of desired settings
4. Centrality and value of fishing

5. Consumptiveness

6. Activity persistence

Limitations

This study was designed to focus on three populations of Idaho residents: active, inactive, and non- anglers, and as such these represent the target populations. For cost reasons, ease of sampling, and because of questionnaire difficulty, only adult general permit holders were included in the sampling frame.

This study is a cross-sectional study of residents only. Data collection was not stratified by region, county or other geo-political construct, and thus these data represent only statewide measurement of angler and non-angler characteristics at one point in time, early 1993. Some findings are very likely to be stable over time and others will be subject to change. Thus, it is important to continue to monitor sentiments and behaviors to identify the stable and unstable trends as well as to enhance the reliability of information used in policy making.

Report Organization

This report is organized into nine chapters. The first, an executive summary, presents a brief overview of the study and its critical findings. The second chapter introduces the study's scope and objectives. The third chapter presents the research methods and procedures, and the fourth provides profiles of the respondents in terms of their demographics, angling history and behavior. Chapter 5 examines the centrality and value of fishing to people and Chapter 6 reports on angler segmentation including motivations and the relationship between angler motivations and satisfaction. Chapter 7 addresses the perceived availability of desired opportunities compared to the demand for the different experiences derived from those opportunities. Chapter 8 examines angler consumptiveness: the role of fish and catching and keeping fish to the sport.

Chapter 9 discusses activity persistence. Six Appendices provide descriptive summaries (frequency distributions) for each of the three survey instruments, the three non-response bias interview forms, and the unedited text of the open comments received from respondents.

CHAPTER 3: SURVEY RESEARCH METHODS

Survey research, using a mail-back questionnaire and following Dillman's (1976) Total Design Method (TDM), was used to collect angling history, experience and setting preferences, demographics, and other baseline data from three sub-populations of Idaho residents. The first was of **active anglers**: those residents who have purchased an annual fishing license each year since 1987. The second was of **inactive anglers**: those residents who purchased a license in 1987 but did not purchase one in any of the years between 1988 and 1992. These two sub-populations were identified on the basis of IDFG's license sales receipts. The final sub-population was of **non-anglers**: those residents who did not purchase a resident fishing license anytime between 1987 and 1992, and was identified by screening an Idaho Tax Commission data base for the social security numbers of residents who belonged to either of the first two sub-populations. Simple random samples were selected from each sample frame (Table 1)

Table 1. Sample sizes and response rates.

Population	Administration dates (1993)	Size of initial mailing	Number undeliverable	Adjusted sample Size	Number returned (achieved sample size)	Response rate
Active anglers	1-4 to 3-13	800	71	729	467	64%
Inactive anglers	3-1 to 5-15	800	407*	393	223	57%
Non-anglers	3-1 to 5-15	1400	293	1107	417	38%

* Includes 221 who returned questionnaires because they are currently active anglers. Errors in the IDFG license database were responsible for this misclassification of anglers.

These response rates are sufficient to ensure probability samples of active, inactive, and non- anglers at the statewide level that have at least a 95% confidence of providing estimates of population parameters that have bounds that are no larger than 5 percent of the parameter.

Survey instrument design was based on three sources. First, a series of literature synopses (Sanyal and McLaughlin 1992,a, b, & c) were prepared to summarize the current state of thinking about angler segmentation, motivation, satisfaction and activity persistence. Second, draft survey instruments were created and submitted to Fisheries Bureau staff for review and authentication. And finally, revised survey instruments were pre-tested in December 1992 with a sample of 31 Moscow area residents with the angling propensities that each sample required. The final content area of each instrument is shown below in Table 2.

Table 2. Summary and comparison of instrument content.

CONSTRUCT	INSTRUMENT 1 Active anglers	INSTRUMENT 2 Inactive anglers	INSTRUMENT 3 Non anglers
General fishing experiences:			
Kinds of fishing	✓	✓	
Fishing partners	✓	✓	
Initiation to fishing	✓	✓	
Competing activities	✓	✓	
Frequency of participation	✓	✓	
Motivations for fishing:			
Desired outcomes (27 items)	✓	✓	

CONSTRUCT	INSTRUMENT 1 Active anglers	INSTRUMENT 2 Inactive anglers	INSTRUMENT 3 Non anglers
Availability of opportunities (27 items)	✓	✓	
Satisfaction (5 items)	✓	✓	
Centrality of fishing	✓	✓	
Consumptive orientation (12 items)	✓	✓	
Activity persistence:			
Reasons for persistence (31 items)	✓		
Quality of fishing waters (5 items)	✓		
Evaluating IDF&G	✓		
Skill level	✓		
Inactivity:			
Reasons for inactivity (36 items)		✓ 31 items were similar to those presented to active anglers	
Quality of fishing waters (5 items)		✓	
Evaluating IDF&G		✓	
Activities that increased since cessation of fishing		✓	

CONSTRUCT	INSTRUMENT 1 Active anglers	INSTRUMENT 2 Inactive anglers	INSTRUMENT 3 Non anglers
New activities		✓	
Impetus for resumption		✓	
Skill level		✓	
Non-angling:			
Reasons for non- angling (36 items)			✓ items were similar to those presented to inactive anglers
Impetus for starting			✓
Interest level			✓
Demographics:			
Age	✓	✓	✓
Gender	✓	✓	✓
Marital status	✓	✓	✓
Memberships	✓	✓	✓
Family life cycle	✓	✓	✓
Employment	✓	✓	✓
Ethnicity	✓	✓	✓
Income	✓	✓	✓

Response formats for all interval scales were constructed using magnitude estimators developed by Bass et al. (1974). This ensured that all interval measures were true equal interval scales and that the results could be compared across sub-populations and with the findings of other studies using similar scale development procedures.

Questionnaire Administration and Computerization

The surveys were designed and administered according to Dillman's (1976) Total Design Method (TDM). The first mailing included a carefully worded cover letter, a letter from the Director of the Idaho Department of Fish and Game that urged participants to return the questionnaire, a questionnaire, and a postage-paid return envelope.

A post card reminder/thank-you was sent to all subjects one week after the initial packet was mailed. Three weeks after initial contact a follow-up letter and replacement questionnaire were sent to non-respondents.

All sub-populations were over sampled (to account for undeliverables and non-response) to ensure that the target sample sizes of 225 for each population would be reached. Although we expected inactive and non-anglers to be less interested in responding to the surveys than active anglers, the rate of undeliverable surveys (25.7%) was much higher than we had anticipated or had experienced with other similar populations or instruments. One explanation, garnered from the letters and/or phone calls that were received from people in the inactive and non-angler samples, is that some of these people did buy 1993 licenses, fished in states other than Idaho, or were holders of lifetime or senior citizen Idaho permits and felt that the survey did not apply to them.

The returned questionnaires were coded and computerized as they were received. Data entry was verified to ensure that less than .5% keystroke error was made in data entry. Data were further checked and errors removed when the SPSS system file was developed. Basically, the verified data base contained very few errors and those errors that remain are assumed to be distributed over the entire sample. Thus their effect is assumed to be insignificant.

Non-response Bias

Non-respondents consisted of individuals who did not return the mailed surveys. To ensure that the answers provided by the people that returned their questionnaires were not significantly different from non respondents, a series of comparisons was made. Respondents' answers for selected questions representing the array of question types in the mail questionnaire were compared to answers collected from a randomly selected sample of the non respondents interviewed by telephone. This sample was equal to 5% of the non-respondent population, or 20 people, whichever was the greater number. The non response bias was done for all three sub-populations.

Non respondents from each sample were sequentially selected from the randomly generated lists of names and addresses in the sample frame, beginning with the first non respondent on the list. Telephone numbers for selected non respondent were obtained through corresponding area phone books. If no phone number was obtainable, that person was dropped from the sample and the next non respondent on the list with a phone number was included. Telephoning was conducted during early April 1993, for the active anglers, and during May and June 1993 for the inactive and non anglers. During calling, if there was no answer, a busy signal, or an answering machine was reached, the next non respondent on the list was called. Call-backs were arranged if someone other than the non respondent was reached. This process was continued until 5% or 20 of the non respondents from each of the groups were reached and consented to be interviewed.

A total of 138 individuals was called at least once. These included 21 whose answering machines were reached, 28 phone numbers for which the residence reached was not that of the non respondent, and 18 phone numbers that were not in service. A total of 71 non-respondents was ultimately reached. Of these, 11 persons (18%) refused to answer any questions because they

disagreed with the idea of research on anglers, or they simply did not want to be bothered.

The telephone interviewing of 60 non respondents consisted of questions common to all 3 instruments (Appendix IV), including (1) questions about reasons for fishing, (2) socio-demographics, (3) a question about Idaho Department of Fish and Game management, (4) a question about their level of angling interest or competence, and (5) a question about activity persistence. A final question asked if the person telephoned had received the mail questionnaire and why they had not returned it.

The reasons given for not returning the questionnaire included 75% who said they didn't have the time or they lost the survey booklet; 5% who said they hadn't fished recently and thought the questionnaire did not pertain to them; 5% who found the questionnaire objectionable because (for example) "it didn't make sense," it was too lengthy, or too personal; 10% said that the questionnaire was not important or that their opinions were not going to matter; and 5% that said they did not want to assist the Idaho Department of Fish and Game.

Statistical tests and comparison of distributions detected very little difference between the mail survey respondents and the respondents interviewed by phone. This held for multiple item scales and questions that were representative of the various types of questions used in the survey instrument.

CHAPTER 4: ANGLER PROFILES

Introduction

The surveys gathered information on the characteristics of (1) active Idaho resident anglers, (2) inactive Idaho resident anglers and (2) non-angling Idaho residents. The anglers described in this report are only those sub-populations ($n_1 = 467$, $n_2 = 223$; and $n_3 = 417$) who met the criteria described under *SAMPLING* (page 5). Appendices' A, B, and C contain copies of the three questionnaires showing the percentages of responses to each question.

Age

Non-anglers, at 48.9 years, posted the highest median age of the three sub-populations. This compares to 40.4 years for active anglers and 45.1 years for inactive anglers. Figure 1 shows the age structure of each sub-population: the inactive angler group lacks the mid-aged (30-50) peak of the active anglers, and the non-angler distribution is skewed toward to 20-40 year olds. This suggests that recruitment of new, younger anglers is reduced relative to active anglers.

Gender

Fishing in Idaho is predominantly a male sport (Figure 2); males account for almost 91 percent of the active angler sample. The male:female ratio for inactive and non anglers is closer to the 50:50 ratio that is descriptive of Idaho as a whole (Idaho Dept. Commerce 1992). Although most studies of fishing and hunting place the gender ratio closer to 85:15, this study separated the active from the inactive angler who are typically included in the sample frame of angler studies, accounting for the higher proportion of males in the active angler sample.

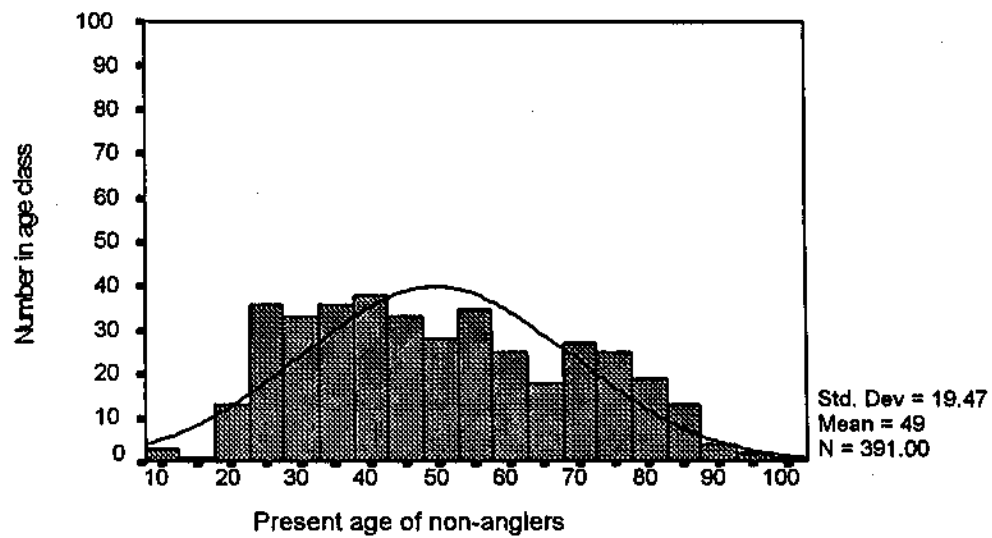
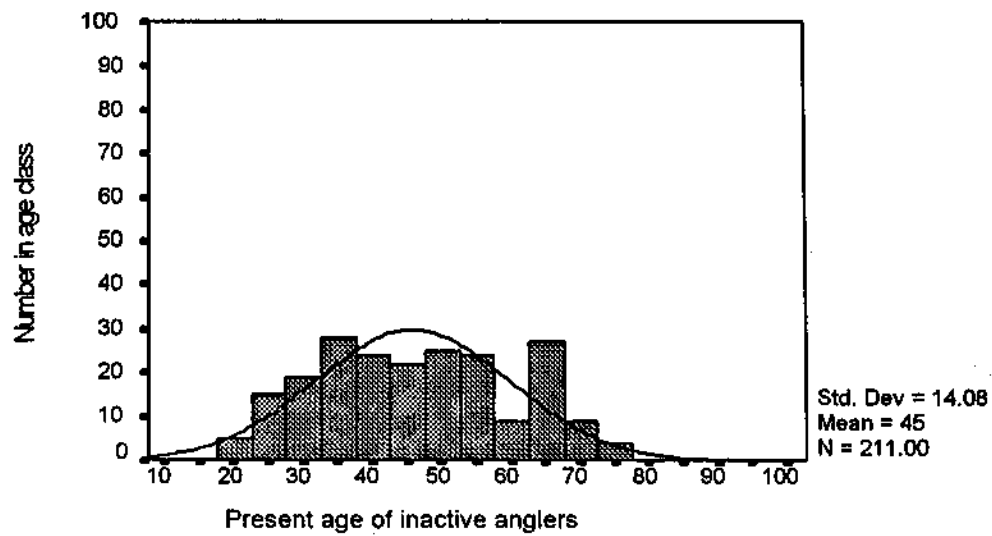
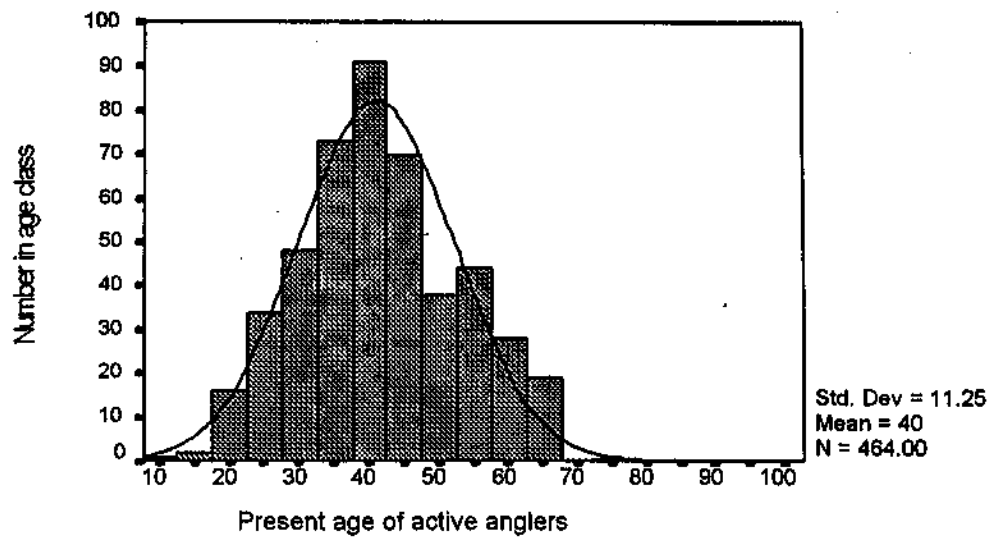


Figure 1. Age distributions of active, inactive and non-anglers.

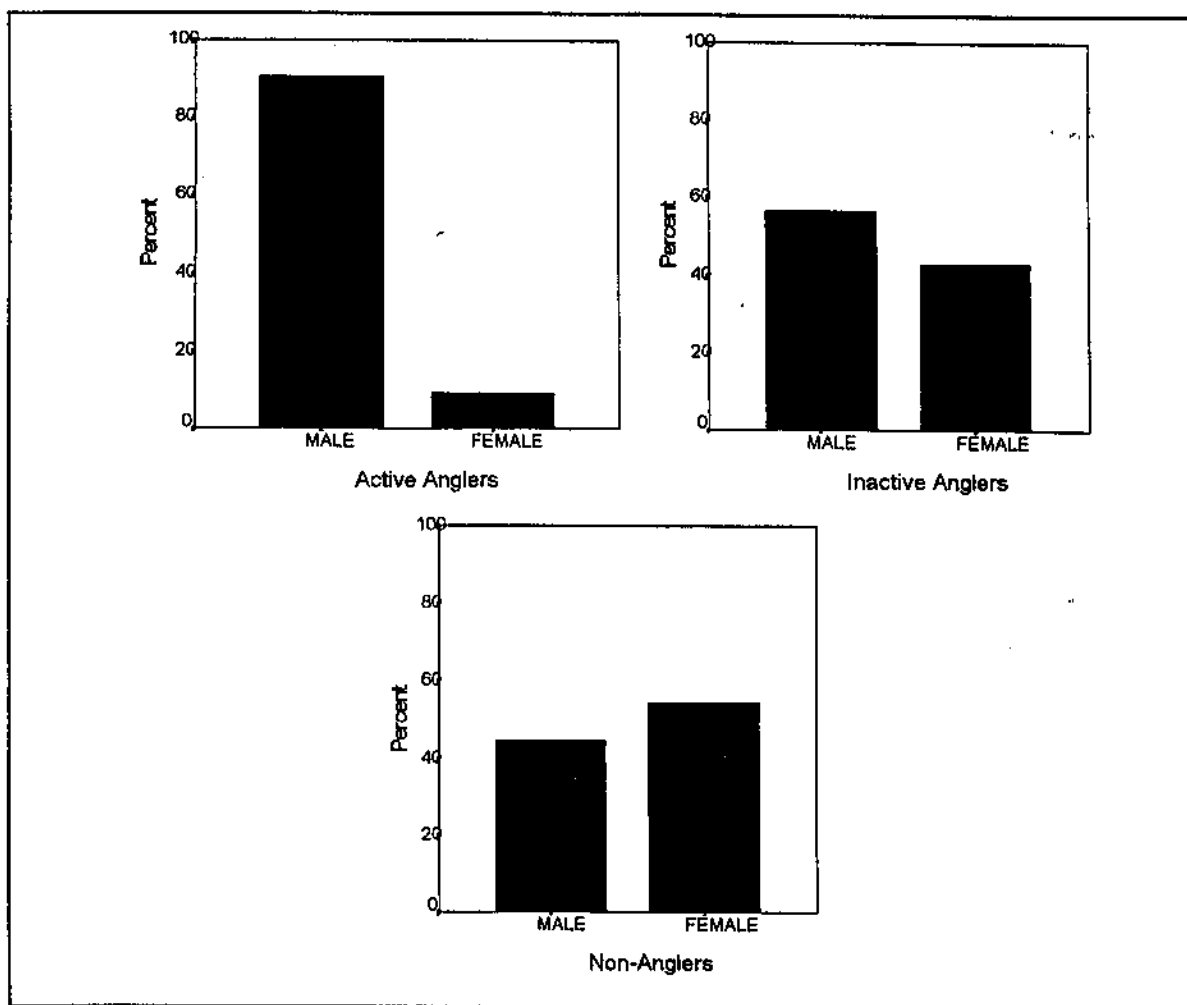


Figure 2. Gender of active, inactive and non-anglers.

Marital Status

About three quarters of each of the three sub-populations is married.

Family Life Cycle

More active anglers (78.6%) have children than do inactive anglers (63%) or non-anglers (55.3%) (Figure 3) and these children are also more likely to be active anglers: just over two-thirds of the children of active anglers, two thirds of the children of inactive anglers, but less than half of the children of non-

anglers share their parents interest in fishing. However, non-anglers have more of their children ($\bar{x} = 3.3$) at home than do active ($\bar{x} = 2.7$) or inactive anglers ($\bar{x} = 1.5$). Furthermore, the children of non-anglers tend to be younger than those of the other two sub-populations (Figure 4) with the mean age of the oldest child living at home being about 12 years, as compared with almost 20 for active anglers and slightly over 20 for inactive anglers.

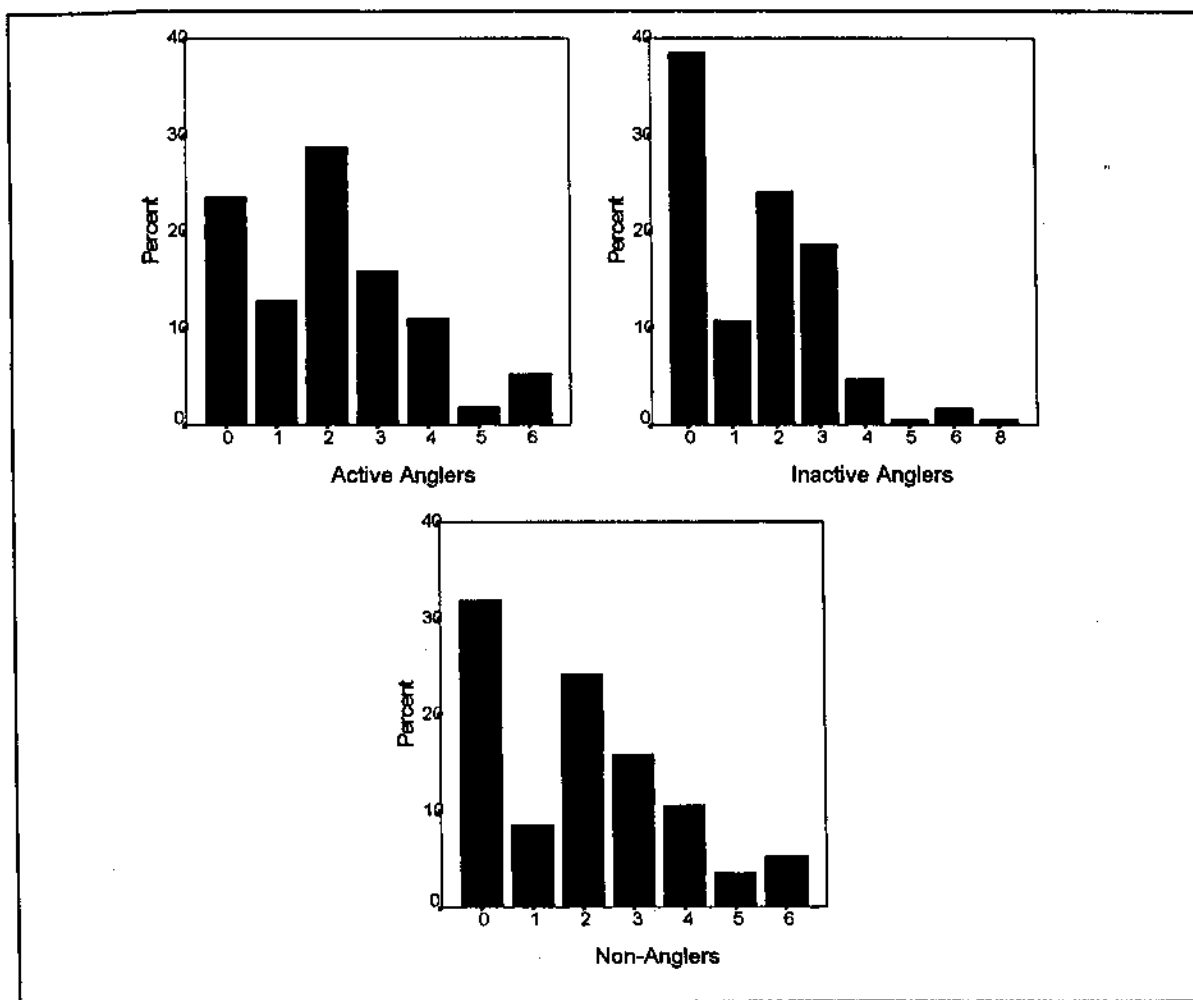


Figure 3. Number of children of active, inactive and non-anglers.

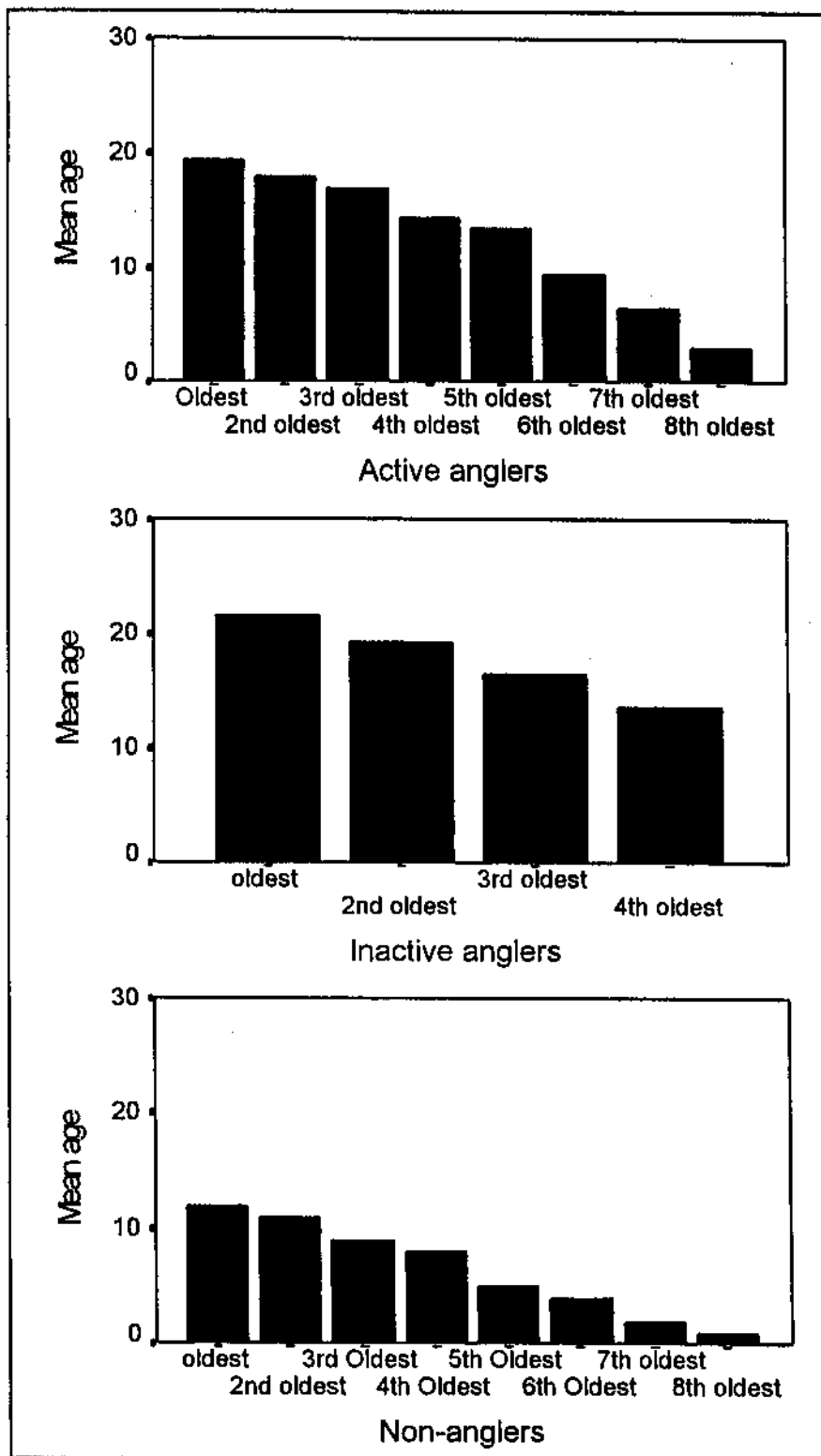


Figure 4. Mean ages of children living at home for each of the three sub-populations.

Employment

Eighty percent of the active anglers are employed full-time, compared to about 70 percent of inactive anglers and just over 40 percent of non-anglers (Figure 5). Non-anglers are also characterized by higher percentages of part-time, homemakers and the retired. Retirees account for almost 25 percent of non-anglers. The three sub-populations also differed in the number of jobs they worked at: active anglers reported a mean of 1.3 jobs, inactive anglers worked at 1.1 jobs, while non anglers, reflecting their higher proportion of retired (and lower proportion of full time workers) averaged only 0.9 jobs per person.

Income

Active anglers are apt to be more affluent than inactive anglers or non-anglers. The median income category for active anglers was \$35-39,000 compared to \$25-29,000 for each of the other two sub-populations. Seventeen percent of active anglers earned less than \$20,000 while over 25 percent earned \$50,000 or more (Figure 6). Conversely, 30 percent of inactive anglers made less than \$20,000, while over 26 percent of non-anglers had incomes below \$20,000 and only 16 percent exceeded \$50,000. Active anglers supported larger families ($\bar{x} = 3.1$) than did the inactive and non-anglers ($\bar{x} = 2.8$).

Race

These three populations (Table 3), and particularly active anglers, overrepresent whites, and consequently underrepresent other ethnic and racial groups.

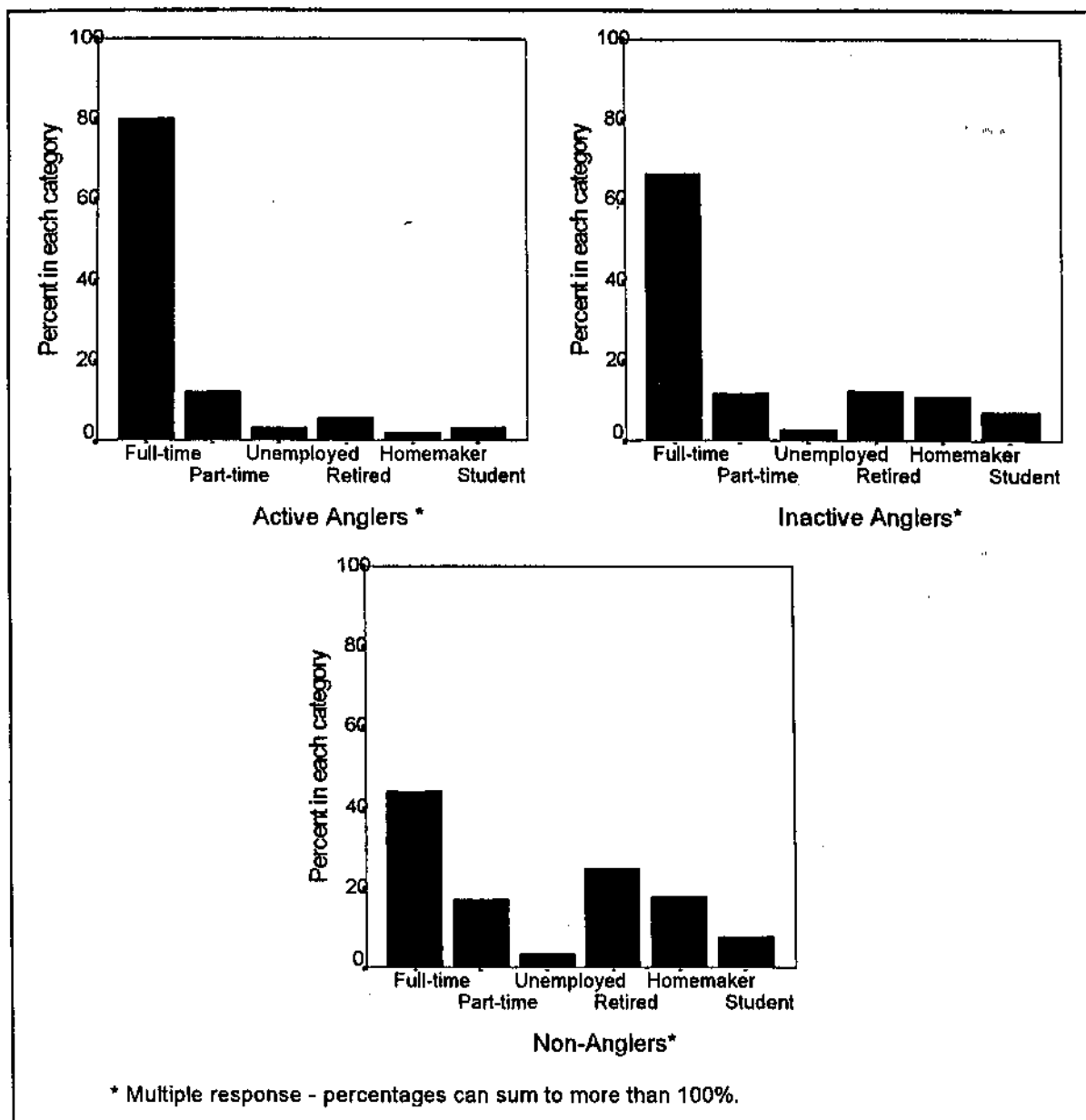


Figure 5. Employment status of active, inactive and non-anglers.

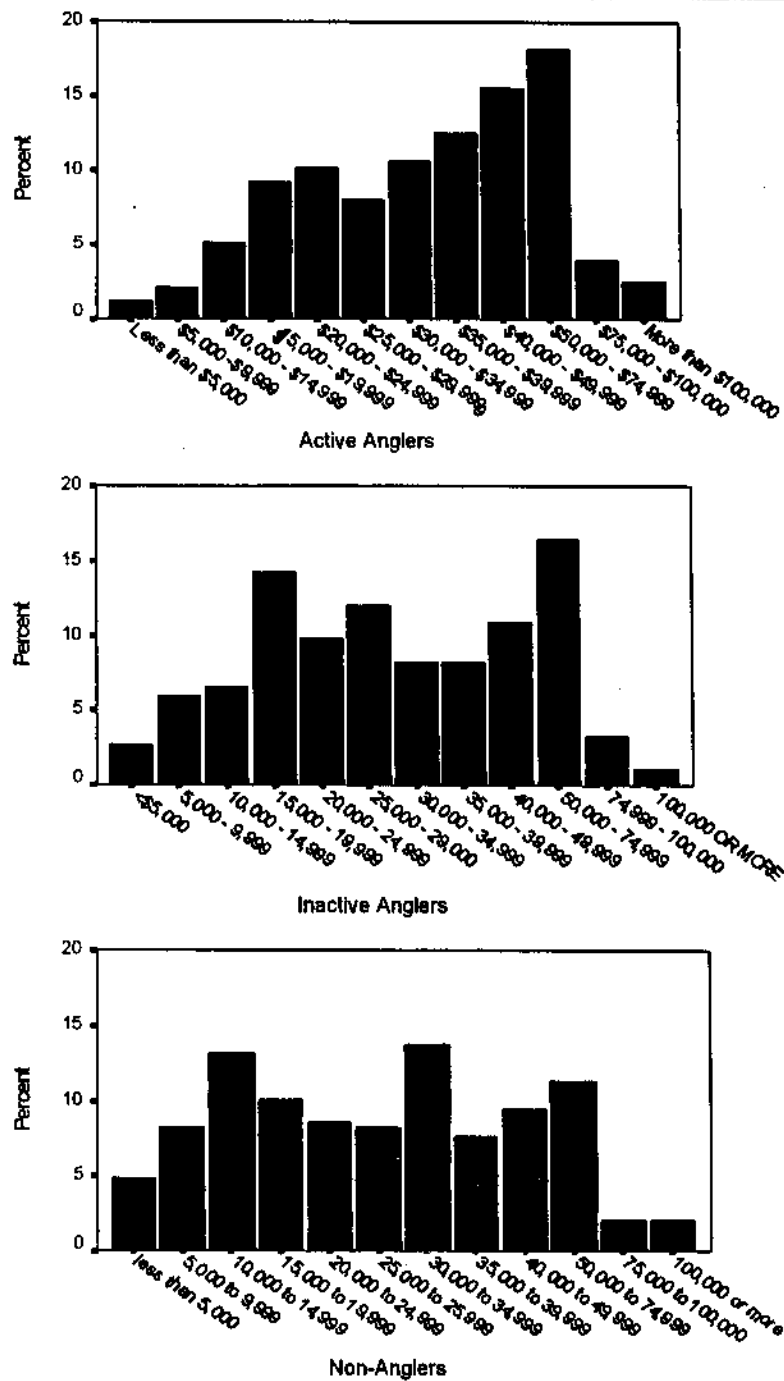


Figure 6. Income distribution by category for active, inactive and non-anglers.

Table 3. Racial composition of active anglers, inactive anglers and non-anglers.

Sub-Population	Race		
	White	Hispanic	All Others
Active Anglers	96.4%	1.2	2.3
Inactive Anglers	93.5	1.5	5.0
Non-Anglers	93.9	3.2	2.9
Idaho population	89.1	5.2	5.6

Angling History and Behavior

Expertise as an angler and interest in fishing

Active and inactive anglers were asked:

How would you rate your expertise as an angler (when you stopped fishing)? (Please check the circle that best represents your skill level)

☐ ☐ ☐ ☐ ☐

(BEGINNER) (EXPERT)

Active anglers rated themselves higher ($\bar{x} = 3.5$) than did inactive anglers ($\bar{x} = 2.8$) on a 5-point experience scale (1=beginner, 5=expert) (Figure 7).

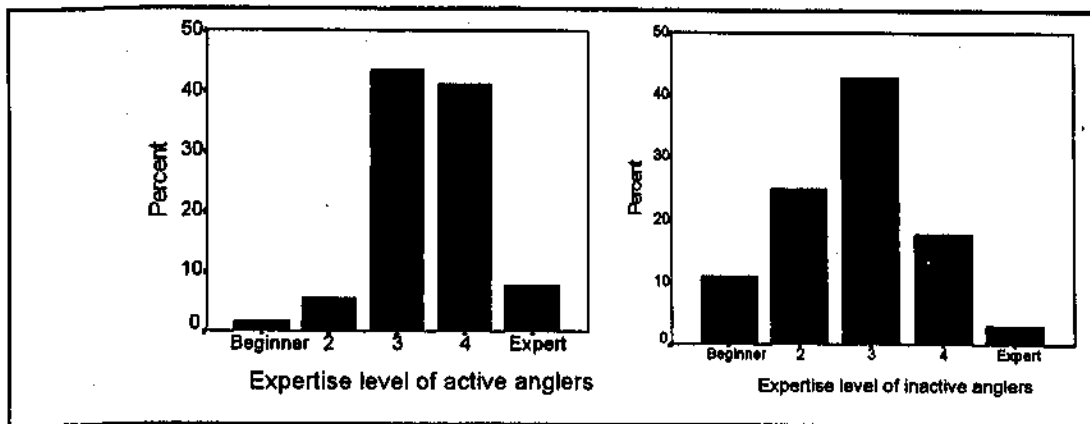


Figure 7. Self rating of expertise level of active and inactive anglers.

Non anglers were asked:

[illegible]

Although about 25 percent of non-anglers reported interest at "high" or "2" the mean was only 3.4, the median was 4.0, and over 35 percent had "low" interest in fishing (Figure 8).

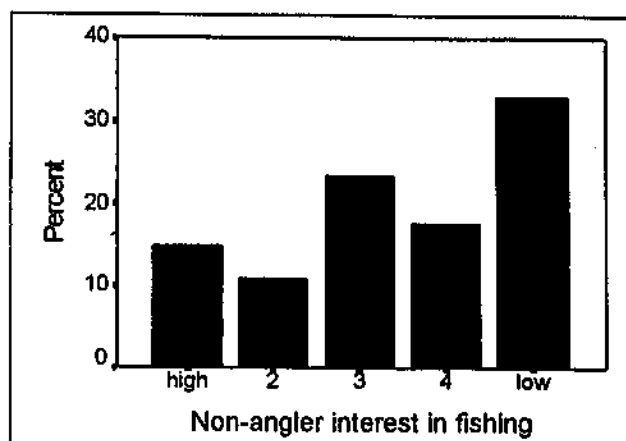


Figure 8. Interest levels of non-anglers.

Kind of Fishing

Active and inactive anglers were asked:

When you do (did) fish what kind of fishing do (did) you engage in? *(Please check as many as apply)*

- ☐ ICE FISHING
- ☐ FLY FISHING
- ☐ BAIT FISHING
- ☐ FISHING FROM A BOAT OR RAFT
- ☐ SHORE FISHING
- ☐ FLOAT TUBE

Figure 9 shows the distribution of participation in each of six major types of fishing. Active anglers are about twice as likely to have tried the more "specialized" forms of the sport (i.e., ice- and fly-fishing) while participation in bait fishing and fishing from the shore is about equally prevalent in both groups.

Fishing from a boat, though more common among active anglers, has been experienced by more than half of each sub-population.

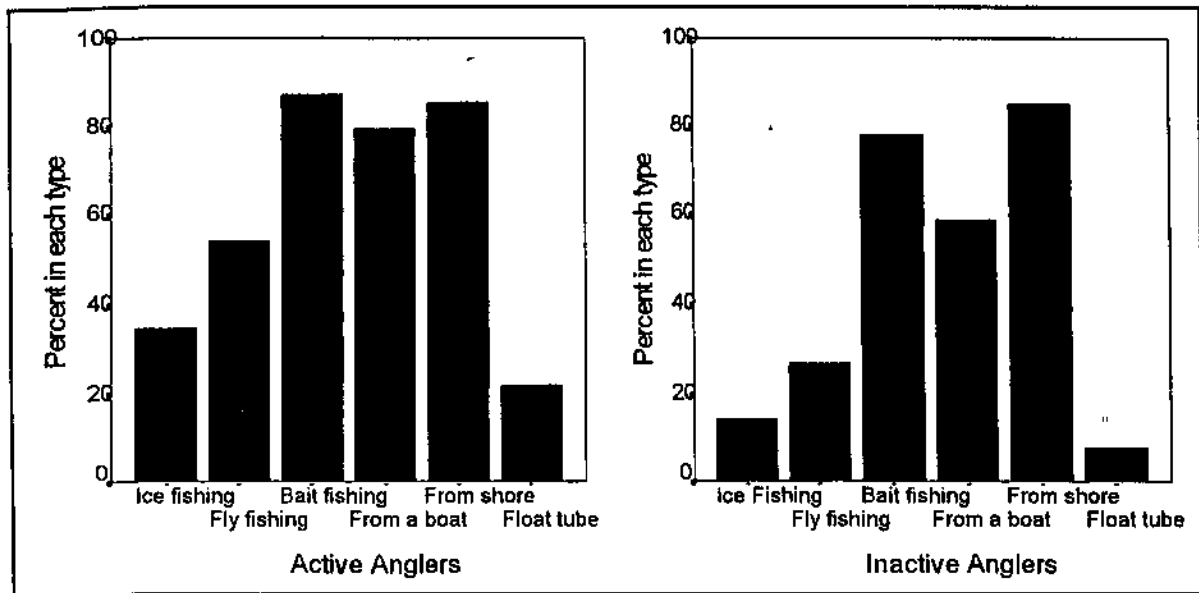


Figure 9. Kinds of fishing engaged by active and inactive anglers.

Figure 10 shows the diversity of the fishing experiences of the two sub-populations in terms of the numbers of different kinds of fishing that each has typically engaged in. On average, an active angler participated in 3.6 kinds of fishing, versus only 2.7 for a currently inactive angler.

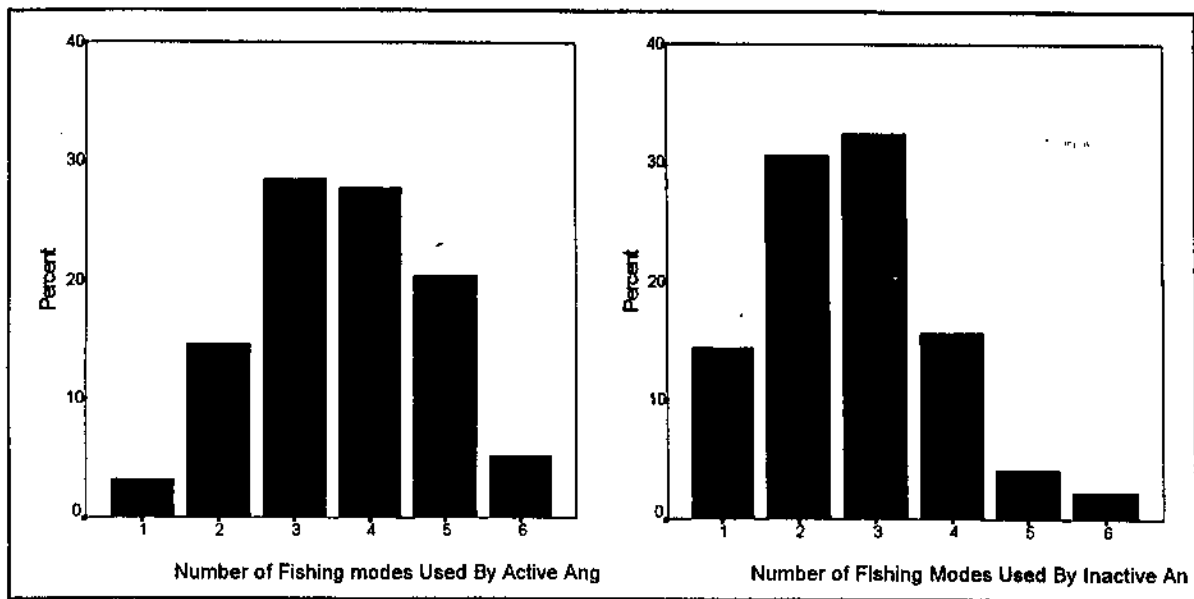


Figure 10. Number of fishing modes used by active and currently inactive anglers.

Fishing Companions

Figure 11 shows that active anglers were more likely to have fished alone or with friends than have currently inactive anglers. Figure 12 shows that this need for solitude was not the only way they have fished: active anglers in general fished with more different types of partners (mean=3.2) than did currently inactive anglers (mean=2.8). A larger proportion of inactive anglers (21%) fished with only one type of partner than did active anglers (12%).

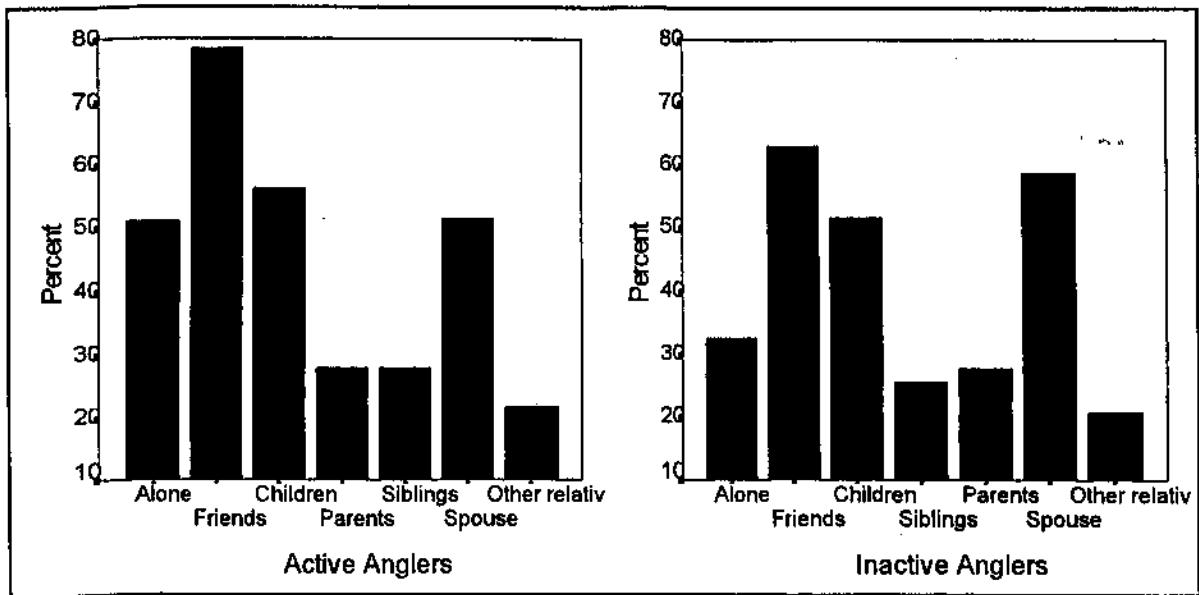


Figure 11. Fishing companions of active and currently inactive anglers.

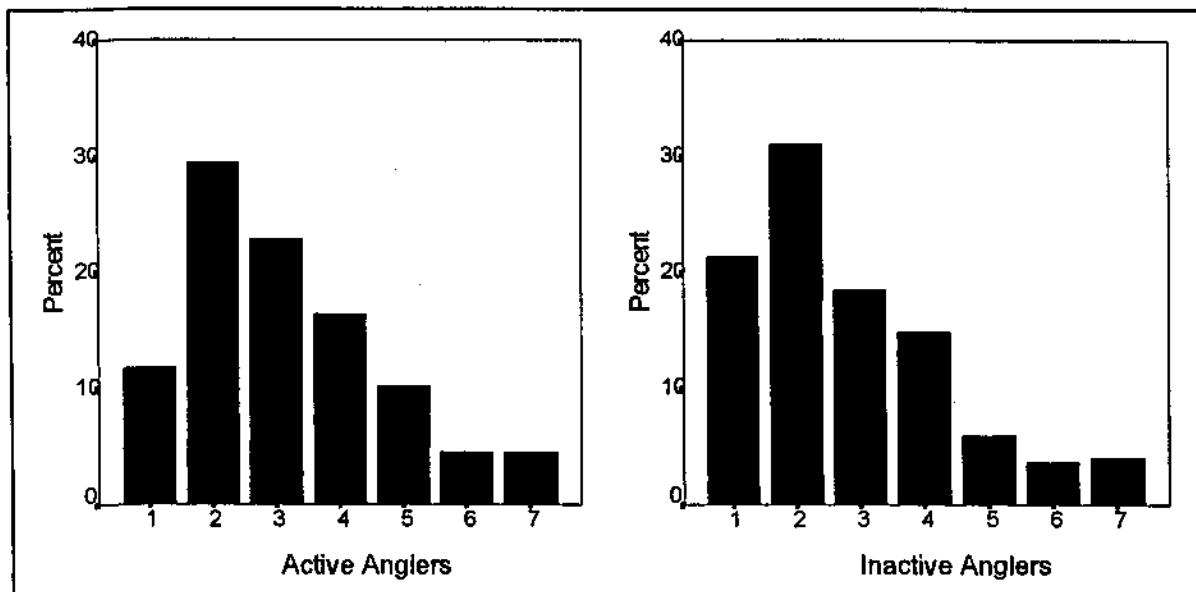


Figure 12. Number of types of different fishing partners that active and currently inactive anglers fished with.

Age of Initiation into fishing

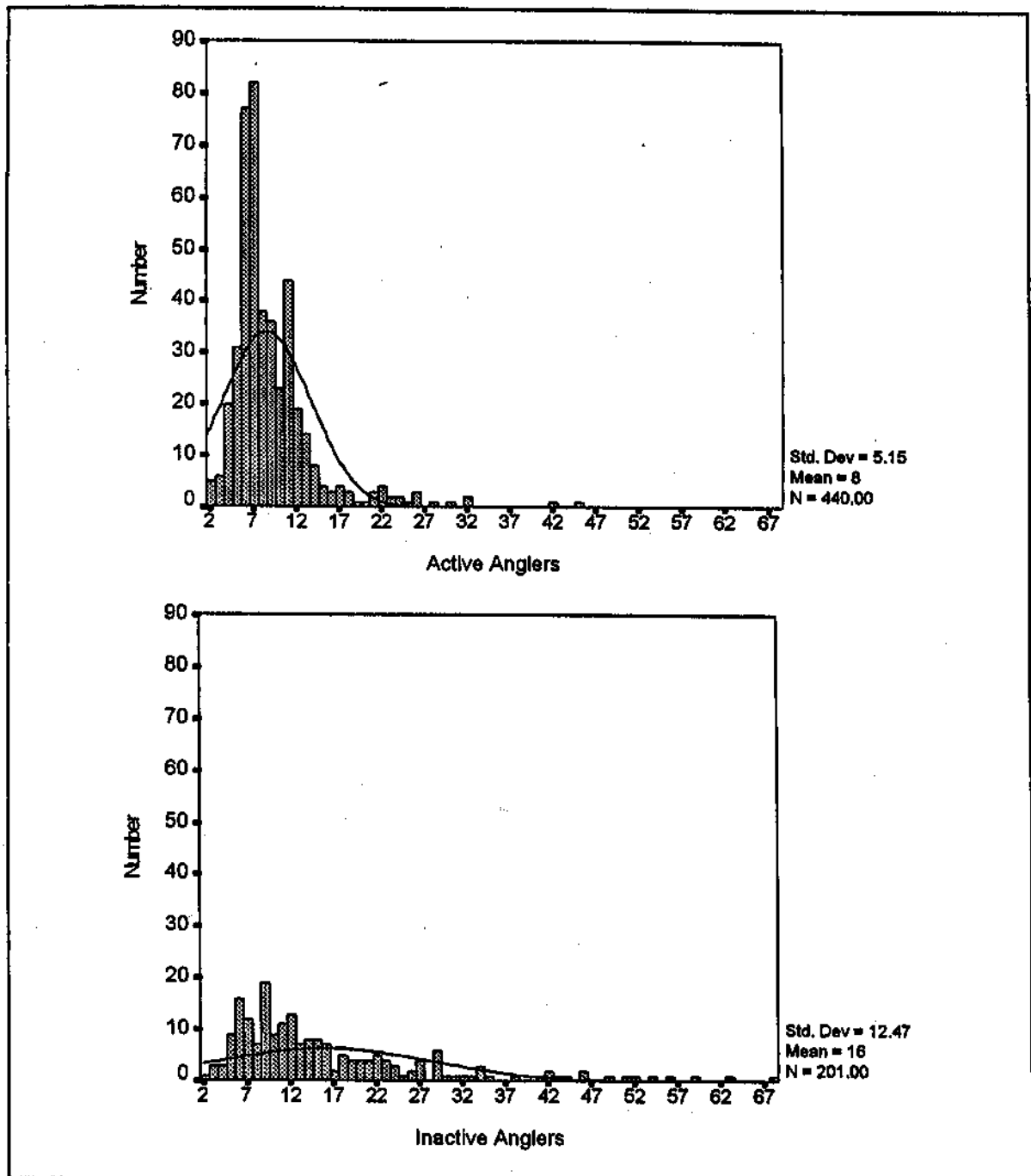


Figure 13. Age of initiation into fishing.

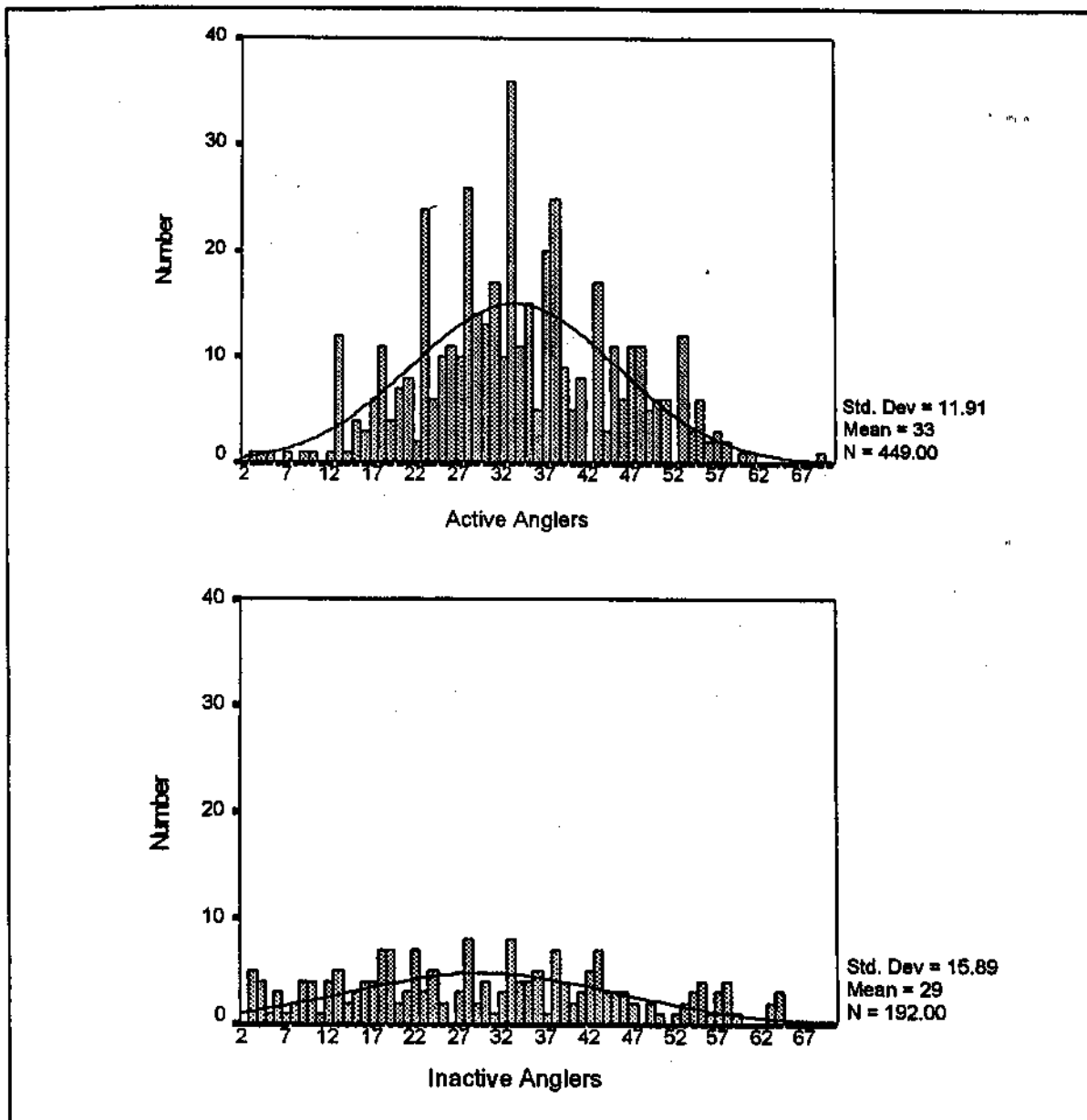


Figure 14. Number of years fished by active and inactive anglers.

On average, active anglers started fishing at 8 years of age, and half had begun by age 6 (Figure 13), suggesting parental or familial influence as the major initiation factor (Aas 1991). Inactive anglers, on the other hand, did not start fishing until after their 16th. birthday, although half had begun by age 11, suggesting the influence of friends as the major factor that initiated them into

fishing. These data differ significantly both in central tendency (Mann-Whitney U test, $p=.000$) and in dispersion (Kolmogorov-Smirnov test, $p = .000$).

Inactive anglers typically had fished for an average of 29 years before becoming inactive, while active anglers have been fishing for an average of 33 years (Figure 14). These data differ significantly both in central tendency (Mann-Whitney U test, $p=.000$) and in dispersion (Kolmogorov-Smirnov test, $p = .002$).

Days Fished Per Year

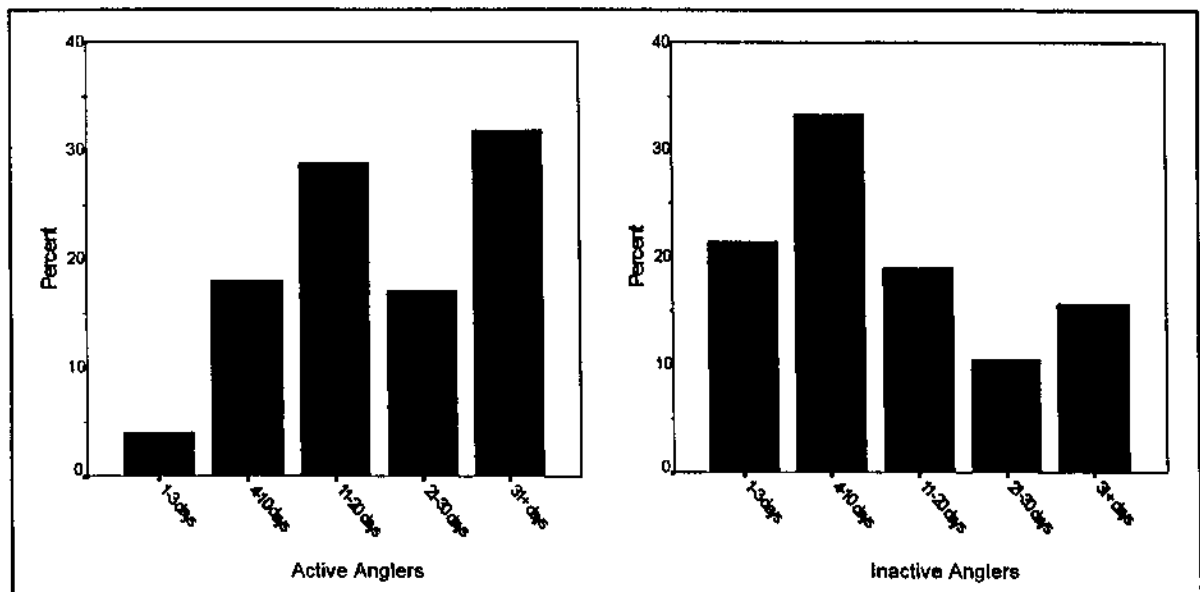


Figure 15. Distribution of days spent fishing per year by active and inactive anglers.

Active anglers currently fish more frequently than did currently inactive anglers (Figure 15) when they did fish (median frequency $\approx 11-20$ days/year, versus $\approx 4-10$ days/year).

Where Fished

Active and inactive anglers make similar use of the different fishing waters available in Idaho (Figure 16). Lakes, rivers and reservoirs being fished by about 90 percent of each group. Mountain lakes are the least fished waters for each sub-population, being fished by about 80 percent of the sample.

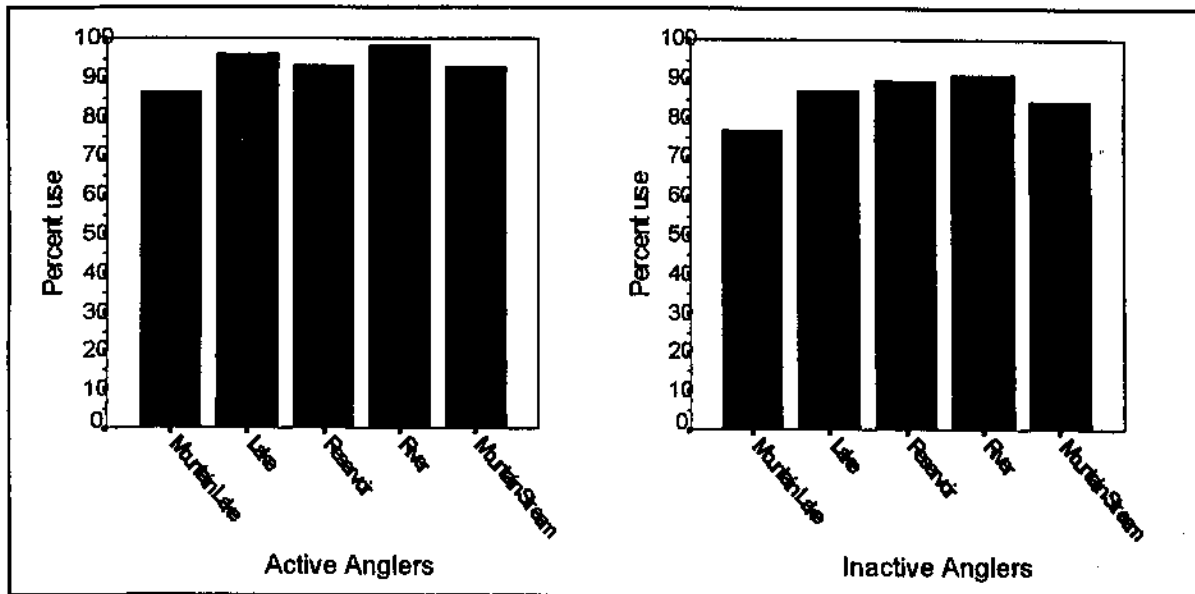
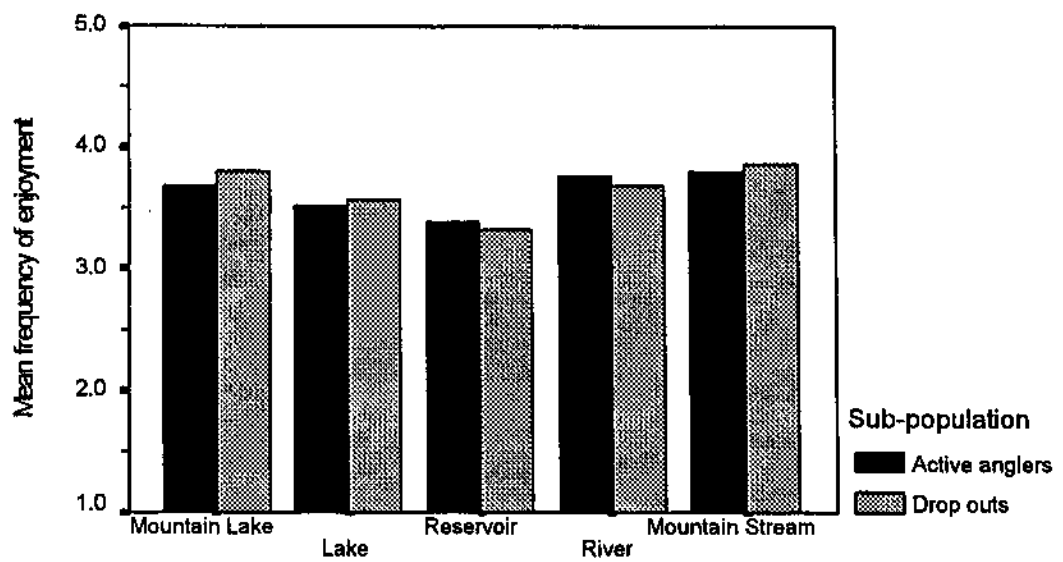


Figure 16. Percent use of types of fishing waters for active and inactive anglers.

Although inactive anglers report slightly higher frequencies of "having an enjoyable trip" than do the active anglers (Figure 17) for mountain lakes, lakes and mountain streams, the difference are not statistically significant (Mann-Whitney U test, $P > .05$).



1 = never, 2 = some of the time, 3 = half of the time, 4 = most of the time, 5 = always.

Figure 17. Frequency of "having an enjoyable trip" at different types of fishing waters, for active and inactive anglers who have fished in each type of water.

CHAPTER 5: CENTRALITY AND VALUE OF FISHING

Each active and non active angler was asked how they would feel if they could not fish. Over half of the active anglers would "miss fishing a great deal" if they could not fish (Figure 18), and less than 10 percent would "not miss it at all" or would "miss it a little." This high value placed on fishing contrasts with the consequences of not fishing that inactive anglers report: less than a quarter of inactive anglers "miss fishing a great deal" while 20 percent report that they "do not miss it at all" or "miss it a little." This difference is also apparent in the mean score given to the consequences of not being able to fish (1= Not miss it; 5= miss it a great deal): active anglers had a mean score of 4.2, while inactive anglers had a mean of only 3.5.

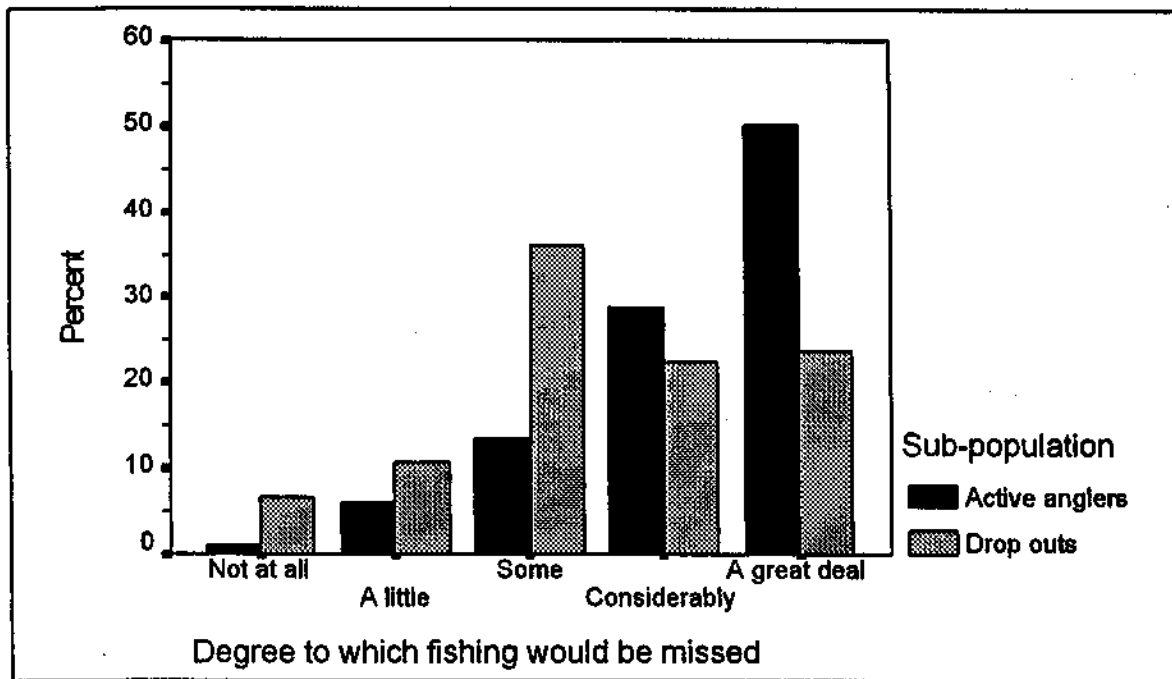


Figure 18. Consequences of not being able to fish.

A second measure of the importance of fishing was made using Fedler and Ditton's (1986) angler satisfaction scales, modified for use with active and inactive anglers (Table 4).

Table 4. Satisfaction with fishing

	Scale	MEAN SCORE ¹	
		ACTIVE ANGLERS	INACTIVE ANGLERS
1.	I thoroughly enjoy fishing.	1.5	1.7
2.	Fishing is not as enjoyable as I thought it would be.	4.2	3.8
3.	I cannot imagine better recreation than fishing.	2.9	2.9
4.	I am disappointed with some aspects of fishing.	2.8	3.0
5.	Fishing is worth the time and money spent to participate.	1.9	2.1

¹ Responses were from 1= Strongly agree, to 5= strongly disagree.

At the single item level both sub-populations have fairly similar overall satisfaction valuations of fishing as a sport on four of the five scale items, particularly on scale item 3 "I cannot imagine a better recreation than fishing" where they are both close to neutral (*Neither agree nor disagree*). However, active anglers enjoy fishing more thoroughly and feel better about the time and money spent fishing. Cumulative satisfaction scores, calculated by adding the scores of each of the five items to create a summated scale, are shown in Figure 18A. The scale ranges from a low of 5 to a high of 25. Active anglers post a mean score of 18.7 (median = 19.0) while inactive anglers have a mean of 18.1 (median = 18.0). While this difference is significant (Mann-Whitney U test, $p = .0403$) the

distribution of scores does not differ between populations (Kolmogorov-Smirnov Test, $p = .052$).

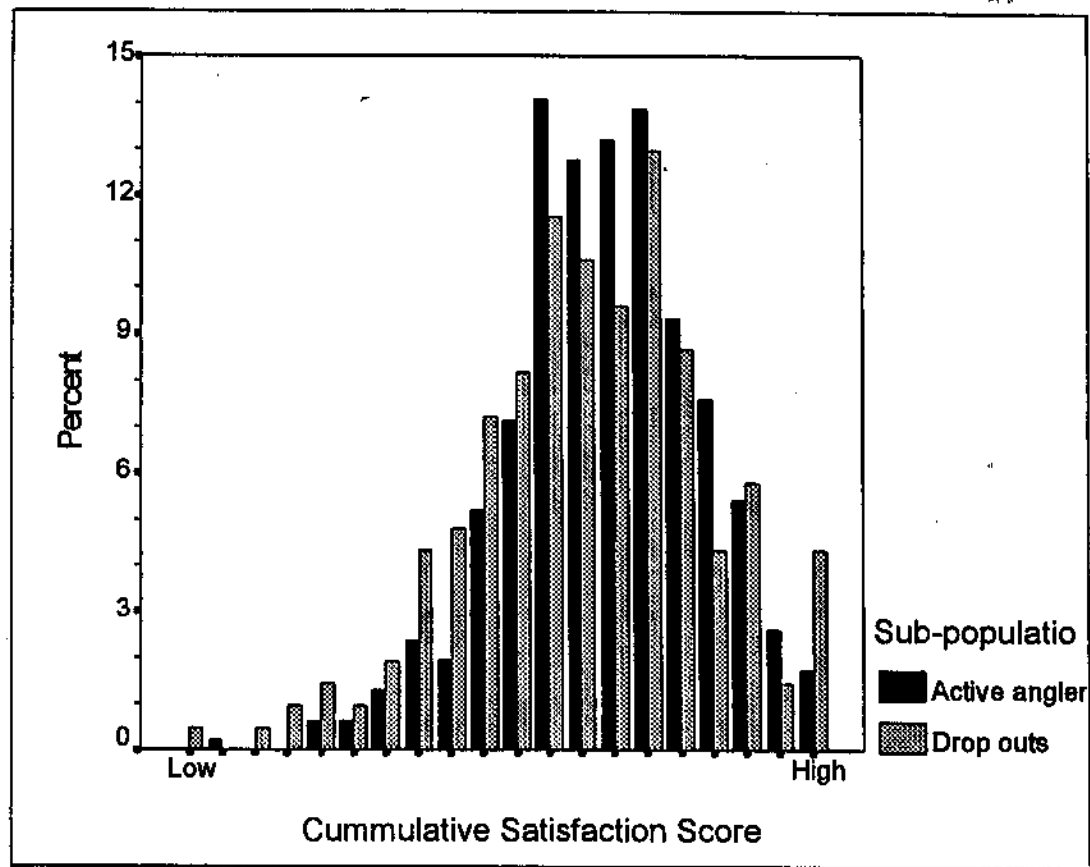


Figure 18A. Cumulative satisfaction scores of active and inactive anglers.

CHAPTER 6: ANGLER SEGMENTATION

Motivations (Desired Experiences)

A growing literature suggests that angler motivation and satisfaction are objective constructs and influenced by more variables than catch success and characteristics. These studies explicitly recognize that people are motivated to act by the desire to fulfill several needs - tacit recognition of the multiple motivations/satisfactions notion. In terms of angling these motivations are best represented by nine general dimensions of motivations that have been widely reported in the literature:

1. Escape; relaxation; change
2. Nature; natural; wild
3. Solitude; introspection; privacy
4. Social opportunities
5. Skills; achievement
6. Challenge; thrill; excitement
7. Consumption; trophy
8. Explore; learn
9. Teach; control

The degree to which people are motivated to seek and find specific elements of the experience/environment has been the underlying paradigm of much angler behavior and market segmentation work. While it is tempting to isolate and focus on a single dimension, it is the unique packages made up of differing combinations of each dimension that best describes what motivates individual anglers, and what allows us to identify groups of anglers who share/seek similar needs. Our synopsis of over a 100 pertinent empirical works

(Sanyal and McLaughlin 1992a) highlighted the universal value of the need for escape (relaxation and change) and for nature (natural and wild settings) in motivating anglers. Not only have most studies included measures of these two dimensions, but most studies have also found these two to be the most important motivational factors for angling.

This suggests that focusing on the other, more variable components of the experience, may allow greater discrimination between types of anglers, and allow more precise measures of angler satisfaction. Furthermore, we concluded that the term "angling" is excessively broad and fails to account for the diversity in motivations, behaviors, experiences and practices of the sport. Almost all the papers we examined accepted, either tacitly or by implication, the notion of multiple dimensions of motivations for fishing (multiple satisfactions).

While the results of individual studies may not be directly comparable to each other because of differences in measurement and wording, the major dimensions of a "generalized" fishing experience appears to include the four domains: natural settings/nature appreciation, using skills and equipment, escape from work-time pressure, and the need/ability to be social. These four domains (components of the experience) have been arrived at through motivational, satisfaction and benefit studies using a variety of approaches and methodologies. They have also been equally well documented for other outdoor pursuits, notably hunting, backpacking, camping, and river running. Does this mean that they are so salient that documenting their presence is the social science equivalent of saying "fish need water?" (That they are not artifacts of survey procedures or researcher bias is borne out by the several studies using corroborative approaches – both closed- and open-ended-questions in the same survey).

This suggested two approaches. First, if they are indeed salient, then the next step is to adequately document the differing and specific needs of the different groups of anglers. This is the social science equivalent of determining

the specific types of waters that individual species of fish need, and is the topic of this chapter. Second, if these domains are common to most outdoor pursuits, then what domains are unique to angling, that is, what does angling provide that other forms of recreation do not? Such a segmentation, based on these "unique-to-angling" domains may prove a better and more meaningful way to type anglers, and is the subject of Chapter 8.

The questionnaires for active and inactive anglers contained an inventory of 27 reasons why people might fish in Idaho. This inventory was based on the Recreation Experience Preference (REP) Scales developed by Driver (1977) and adapted for consumptive wildlife experiences (McLaughlin et al. 1989, Sanyal et al. 1989, and Sanyal and McLaughlin 1990). Respondents were asked to indicate how important each reason for fishing was to them. The reasons why people fish can also be thought of in terms of the attributes anglers would like to experience during their participation, and their reasons can be considered components of quality fishing experiences.

At an aggregate level (Table 5) the most highly rated reasons were not harvest, catching, or other fish related attributes, but aspects of the more human/personal experiences of the sport such as the need to be able to escape, the need to be close to nature, to be in natural settings, to experience tranquillity, social bonding and companionship.

Table 5 also compares the relative importance of the 27 reasons for fishing between active and inactive anglers. Two specific comparisons are offered. The first a measure of salience—the percentage of each sample who rated each item "quite" or "extremely important," and second the relative rank ordering of responses based on this percentage. Getting away from daily demands is the prime reason for active anglers to fish: Over three quarters of the sample found it important enough for it to rank first. Conversely, only two thirds of inactive anglers feel a similar need for escape. Almost 60 percent of active anglers seek the stimulation and excitement of fishing compared to about 46 percent of inactive

anglers. Reflecting their more persistent and long-term relationship to the sport, almost 60 percent of active anglers fish in order to bring back pleasant memories, compared to just over a third of inactive anglers.

Other comparisons, though important to less than half of active anglers, point to the greater need for active anglers to want to learn about their fishing waters, to reduce tension through fishing, to learn about fish, to see fish jump and rise, to experience solitude, to test their abilities and equipment and to pass on their knowledge to others. These are all characteristics that indicate a higher level of personal involvement in and gratification from fishing - active anglers are almost twice as likely to seek these experiences from fishing than are inactive anglers.

Finally, at the end of the list, and important to less than a fifth of the active anglers are consumptive attributes, such as catching trophy fish, catching different kinds of fish, and so on. What is important here is not just that these experiences are valued less than the those listed earlier in the table, but the proportion of active anglers finding them important is twice that of inactive anglers.

This list begins to form an answer basic to this study, namely, what are people doing when they fish. Thus it would be appropriate to think of a majority of active anglers as using fishing as the means to satisfy their need to escape from life's demands, to experiencing nature, tranquillity, the excitement of fishing, bringing back memories, and to be with family.

Table 5. Importance of reasons for fishing in Idaho

Reason	Percent responding "Quite" or "Extremely" Important			
	Active anglers		Inactive anglers	
	Percent	Rank	Percent	Rank
Getting away from the usual demands of life.	77.7	1	67.6	4
Being in natural settings while I fish.	73.3	2	71.9	1
Feeling close to nature while I fish.	66.2	3	69.5	2
Experiencing tranquillity while I fish.	66.2	4	68.6	3
For the stimulation and excitement of fishing	59.7	5	46.0	6
Bringing back pleasant memories	56.8	6	36.8	9
Being with my family while I fish.	51.1	7	57.0	5
Being with friends while I fish.	46.1	8	40.8	7
Learning more about the river, lake or stream.	42.7	9	28.1	10
Developing close friendships with my fishing companions.	40.9	10	38.6	8
Releasing or reducing some built-up tensions while I fish.	40.0	11	25.9	12
Learning more about fish.	36.1	12	19.0	15
Being on my own	35.7	13	14.9	18
Seeing fish jump or rise.	30.7	14	19.1	14
Catching any fish.	28.4	15	22.3	13
Thinking about my personal values while I fish.	27.6	16	26.7	11
Developing personal spiritual values.	23.9	17	16.3	17

Reason	Percent responding "Quite" or "Extremely" Important			
	Active anglers		Inactive anglers	
	Percent	Rank	Percent	Rank
Testing my fishing abilities.	21.2	18	11.4	20
Testing and using my fishing equipment.	20.3	19	12.0	19
Sharing what I know about fishing with others.	19.7	20	9.5	22
Developing my fishing skills.	19.1	21	17.1	16
Catching trophy fish.	19.1	22	11.4	21
Catching different kinds of fish.	18.2	23	5.3	24
Putting meat on the table.	11.1	24	6.2	23
Filling my daily catch limits.	7.4	25	3.8	26
Competing against other anglers.	4.6	26	2.9	27
Showing others I can fish.	4.4	27	4.3	25

These 27 items, based on Driver's (1977) Recreation Experience Preference (REP) item pool, were assembled to provide a multi-attribute, multi-measure, empirically based segmentation of anglers to identify the broad range of angler experiences and markets offered in Idaho. These results show that there is considerable variation, not only in how active and inactive anglers value each attribute, but also within each sub-population. Ideally, such a segmentation should be done with the largest sample possible to account for the maximum variation in the population. However, because we are treating active and inactive anglers as two separate populations in this case, and because each was asked to rate the reasons for fishing from two separate perspectives—active anglers from a present day perspective, while inactive anglers were instructed to recall preferences from a perspective that may be dimmed by as many as 5 years

of non-fishing – we analyzed each sample separately. Fishing is an activity that should best be described in a multi-goal or multi-satisfaction perspective. The multiple goals of anglers were identified using principal components analysis with varimax rotation.

Market segmentation of active anglers

Seven factors with eigenvalues greater than 1.0 and accounting for 61 percent of the variance in the data were identified (Table 6). Only items with factor loadings greater than .50 for a single factor were retained, reducing the chance that an item would load on more than one factor. Two of the 27 items were not used because their loadings were distributed across two or more factors. Reliability analysis produced Cronbach alpha coefficient (Cronbach 1951) ranging from .64 to .86 (Reliability was not determined for solitude, a single item scale). The remaining items were associated with these seven identifiable dimensions:

1. Developing and using fishing skills
2. Being in nature/escape from pressure
3. Developing personal values
4. Social bonding
5. Consumptiveness
6. Compete with others/social recognition
7. Solitude

Table 6. Factor composition and statistics for active anglers.

Factor	Scale items	Factor loadings	Eigenvalue (% of variance)	Cronbach Alpha
<u>Developing and using fishing skills</u>			6.9 (25.4)	.86
	Catching different kinds of fish.	.59		
	Developing my fishing skills.	.68		
	For the stimulation and excitement of fishing	.59		
	Learning more about fish.	.74		
	Learning more about the river, lake or stream.	.71		
	Sharing what I know about fishing with others.	.52		
	Testing and using my fishing equipment.	.80		
	Testing my fishing abilities.	.71		
<u>Being in nature/escape pressure</u>			2.8 (10.4)	.78
	Being in natural settings while I fish.	.68		
	Experiencing tranquillity while I fish.	.68		
	Feeling close to nature while I fish.	.64		
	Getting away from the usual demands of life.	.79		
	Releasing or reducing some built-up tensions while I fish.	.51		
<u>Develop personal values</u>			1.7 (6.3)	.74
	Bringing back pleasant memories	.55		
	Developing personal spiritual values.	.72		
	Thinking about my personal values while I fish.	.74		
<u>Social bonding</u>			1.6 (5.9)	.68
	Being with friends while I fish.	.83		
	Being with my family while I fish.	.63		
	Developing close friendships with my fishing companions.	.74		

Factor	Scale items	Factor loadings	Eigenvalue (% of variance)	Cronbach Alpha
<u>Consumptiveness</u>			1.2 (4.5)	.64
	Catching any fish.	.63		
	Filling my daily catch limits.	.81		
	Putting meat on the table.	.78		
<u>Compete with others/social recognition</u>			1.1 (4.2)	.65
	Competing against other anglers.	.80		
	Showing others I can fish.	.76		
<u>Solitude</u>			1.1 (4.0)	N/A
	Being on my own	.78		

Two items, *catching trophy fish*, and *seeing fish jump or rise* had factor loadings that were split among two or more factors and were not used in further analysis.

The final factors - or scales - can be viewed as seven independent and homogenous dimensions that describe important components of angling. These dimensions are somewhat consistent with both common sense and past research (Sanyal and McLaughlin 1992a). It is important to remember that the factors are described by their constituent variables and not by the name that we have assigned each factor. For example, developing and using fishing skills is constructed from eight variables, but it has nothing to do with the level of skill an individual angler may have or aspire to. Rather, it describes the affinity each angler has for catching different kinds of fish, for developing fishing skills, for experiencing the stimulation and excitement of fishing, for learning more about fish and about the river, lake or stream, for needing to share what they know about fishing with others, for testing and using their fishing equipment, and for testing their fishing abilities.

The 1990 revision of Wolfe Normal Mixture Analysis Procedure (NORMIX), a cluster analysis program (Wolfe 1970) in which the accepted cluster solution maximizes the between-group differences while minimizing the

within-group differences, was used to develop the angler types using the seven scales/dimensions identified above.

The scores for all the items comprising each scale were summed and divided by the number of items in the scale to produce a mean importance score for that scale. Chi-square analysis (Wolfe 1970) to test the hypotheses that there were 4 rather than 3 types of anglers was significant, however the test for 5 types instead of 4 was not significant ($p > 0.05$). Therefore the 4 angler type solution was selected and used as the basis for developing angler typologies.

Table 7 shows how important each of the seven factors/dimensions for angling was to the four active angler types and provides a summary of the similarities and differences among active angler types. It should be noted that these four angler types were derived from the specific set of variables measured by the instruments developed for this study. A different set of variables, or of a different cluster analysis procedure, could possibly yield different results. The procedures followed in this analysis were designed to yield a valid and reliable set of angler types that would be useful to the Department of Fish and Game, but it is not the only possible categorization of Idaho anglers.

A Kruskal-Wallis one-way ANOVA tested for differences in mean factor scales score among the four angler types. Differences were significant ($p \leq 0.05$) for all factor scales except "Develop personal values." Paired Mann-Whitney U tests were used to test for significantly differently pairs (Table 7).

Table 7. Factor scale means[⊠] for active angler types

Angler type	Developing and using fishing skills	Being in nature/escape pressure	Develop personal values	Social bonding	Consumptiveness	Compete with others /social recognition	Solitude
1 (n=137; 29%)	2.9 abc [⊡]	3.2 a	3.0	3.2 ac	2.0 abc	1.3 abc	4.1 ac
2 (n=14; 3%)	3.7 ad	3.8 ad	3.4	3.7 a	2.8 ad	3.8 ade	4.0 de
3 (n=249; 53%)	2.7 bdf	3.1 df	2.8	3.2	2.0 af	1.2 bdf	1.2 bd
4 (n=26; 6%)	3.3 cf	3.5 f	2.8	3.6 c	2.7 cf	2.8 cef	1.1 ce

⊠ 1 = Not important; 2 = Somewhat important; 3 = moderately important; 4 = quite important; and 5 = Extremely important.

⊡ Means that differ significantly from each other are denoted by similar letters, reading down each column (Mann-Whitney U test, $p \leq 0.05$)

Type 1 anglers (29 percent of the population) are motivated most by a need for solitude, least by a need for consumption and competition, and have more moderate for the other four factors.

Type 2 (3 percent) are a small but very exacting group of anglers who seek to satisfy high demands on all factors except the needs for personal values and consumptiveness.

For the majority of active anglers, Type 3 (53 percent of the population) angling is motivated by a mid level of need to develop skills, escape pressure and experience nature, develop personal values, and achieve social bonding; and show little need for consumptiveness, competition/social recognition and solitude.

Type 4 (6 percent) are seeking social cohesiveness above other needs, and conversely have little need for solitude.

These comparisons are shown at a relative level in Table 8, and at an absolute level in Figure 19 and Table 7.

Table 8. Relative levels of importance placed by the four active angler types on the seven reasons for fishing scales.

ANGLER TYPE	REASONS FOR FISHING (factors or scales)						
	Developing and using fishing skills	Being in nature/escape pressure	Develop personal values	Social bonding	Consump-tiveness	Compete with others /social recognition	Solitude
Type 1	MEDIUM	MEDIUM	MEDIUM	MEDIUM	LOW	LOW	HIGH
Type 2	HIGH	HIGH	MEDIUM	HIGH	MEDIUM	HIGH	HIGH
Type 3	MEDIUM	MEDIUM	MEDIUM	MEDIUM	LOW	LOW	LOW
Type 4	MEDIUM	MEDIUM	MEDIUM	HIGH	MEDIUM	MEDIUM	LOW

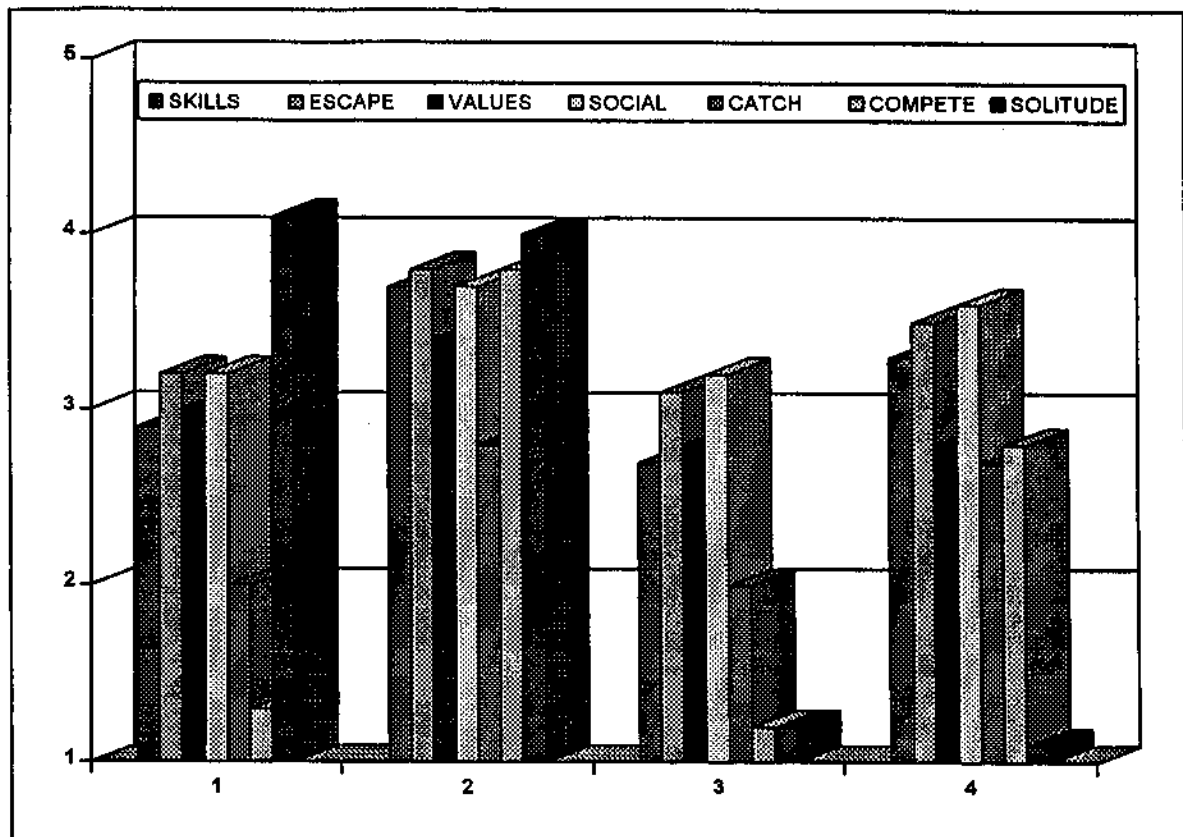


Figure 19. Comparisons of factor scale means for the four types of active anglers.

Market segment scales for inactive anglers

Six factors, with eigenvalues greater than 1.0 and accounting for 65 percent of the variance in the data, were identified (Table 9). Only items with factor loadings greater than .50 for a single factor were retained. Four of the 27 items were not used because their loadings were distributed across two or more factors. Reliability analysis produced Cronbach alpha coefficients ranging from .51 to .85. The remaining items were associated with six identifiable dimensions:

1. Developing and using fishing skills
2. Being in nature/escape pressure
3. Develop personal values
4. Social bonding
5. Compete with others/social recognition
6. Consumptiveness

Table 9. Factor composition and statistics for inactive anglers.

Factor	Scale items	Factor loadings	Eigenvalue (% of variance)	Cronbach Alpha
<u>Developing and using fishing skills</u>			7.4 (27.3)	.85
	Catching different kinds of fish.	.59		
	Developing my fishing skills.	.71		
	For the stimulation and excitement of fishing	.53		
	Learning more about fish.	.75		
	Learning more about the river, lake or stream.	.65		
	Testing and using my fishing equipment.	.74		

Factor	Scale items	Factor loadings	Eigenvalue (% of variance)	Cronbach Alpha
	Testing my fishing abilities.	.71		
<u>Being in nature/escape pressure</u>			2.8 (10.5)	.84
	Being in natural settings while I fish.	.82		
	Experiencing tranquillity while I fish.	.78		
	Being close to nature while I fish.	.68		
	Getting away from the usual demands of life.	.63		
<u>Develop personal values</u>			2.1 (7.7)	.74
	Bringing back pleasant memories	.67		
	Developing personal spiritual values.	.60		
	Thinking about personal values while I fish.	.78		
<u>Social bonding</u>			1.5 (4.5)	.78
	Being with friends while I fish.	.76		
	Being with my family while I fish.	.40		
	Developing close friendships with my fishing companions.	.78		
<u>Compete with others/social recognition</u>				.65
	Competing against other anglers.	.81	1.1 (4.2)	
	Catching trophy fish	.59		
	Showing others I can fish.	.72		
<u>Consumptiveness</u>			1.0 (3.7)	.61
	Catching any fish.	.50		
	Filling daily catch limits.	.60		
	Putting meat on the table.	.77		

Four items, *sharing what I know with others, reducing tensions through fishing, seeing fish jump or rise, and being on my own*, had factor loadings that were split among two or more factors and were not used in further analysis.

A total of 189 inactive angler cases were used in the NORMIX analysis. Chi-square analysis (Wolfe 1970) to test the hypotheses that there were 4 rather than 3 types of anglers was significant, however the test for 5 types instead of 4 was not significant ($p > 0.05$). Therefore the 4 angler type solution was selected and used as the basis for developing typologies.

Table 10 shows how important each of the seven factors/dimensions for angling was to the four inactive angler types. This provides a summary of the similarities and differences among inactive angler types. It should be noted that these four inactive angler types were derived from the specific set of variables measured by the instruments developed for this study.

A Kruskal-Wallis one-way ANOVA tested for differences in mean factor scales score among the four angler types. Differences were significant ($p \leq 0.05$) for all factor scales (Table 10). These comparisons are shown at a relative level in Table 11, and at an absolute level in Figure 20 and Table 10.

Table 10. Factor scale means[⊠] for inactive angler types.

Angler type	Developing and using fishing skills	Being in nature/escape pressure	Develop personal values	Social bonding	Consumptiveness	Compete with others /social recognition
1 (n=14; 7%)	1.9 ac [⊠]	4.5 b	3.5 abc	1.9 abc	1.2 abc	1.0 abc
2 (n=28; 15%)	2.8 ad	4.2 d	2.7 ad	3.6 ad	2.2 ade	2.9 ade
3 (n=112; 59%)	2.1 df	3.6 bd	2.3 bdf	2.9 bd	1.6 bd	1.2 bdf
4 (n=35; 19%)	3.0 cf	4.0	2.3 cf	3.5 c	2.9 ce	1.4 cef

[⊠] 1 = Not important; 2 = Somewhat important; 3 = moderately important; 4 = quite important; and 5 = Extremely important.

[⊠] Means that differ significantly from each other are denoted by similar letters, reading down each column (Mann-Whitney U test, $p \leq 0.05$)

Table 11. Relative levels of importance placed by the four inactive angler types on the six reasons for fishing scales.

ANGLER TYPE	REASONS FOR FISHING (factors or scales)					
	Developing and using fishing skills	Being in nature/escape pressure	Develop personal values	Social bonding	Consumptiveness	Compete with others /social recognition
Type 1	LOW	HIGH	HIGH	LOW	LOW	LOW
Type 2	MEDIUM	HIGH	MEDIUM	HIGH	LOW	MEDIUM
Type 3	LOW	MEDIUM	LOW	MEDIUM	LOW	LOW
Type 4	MEDIUM	HIGH	LOW	HIGH	MEDIUM	LOW

Type 1 anglers (7 percent of the population) were motivated most by strong needs for experiencing nature and escaping daily pressures and for developing personal values. This type has the highest need for developing personal values of all four types. Other needs are all low.

Type 2 (15 percent) were most motivated by high needs for experiencing nature and for social bonding. Other needs were all moderate, except for consumptiveness which is low. The need for social recognition, while only moderate, is the highest of all four inactive angler types.

For the majority of active anglers, Type 3 (59 percent of the population) angling was motivated by only moderate needs for escaping pressure/experience nature and social bonding. The needs for other experiences are all low.

Type 4 (19 percent) are seeking to satisfy high needs for social cohesiveness and nature above other needs. They have little need for social recognition and only a moderate demand for skill development and consumptiveness.

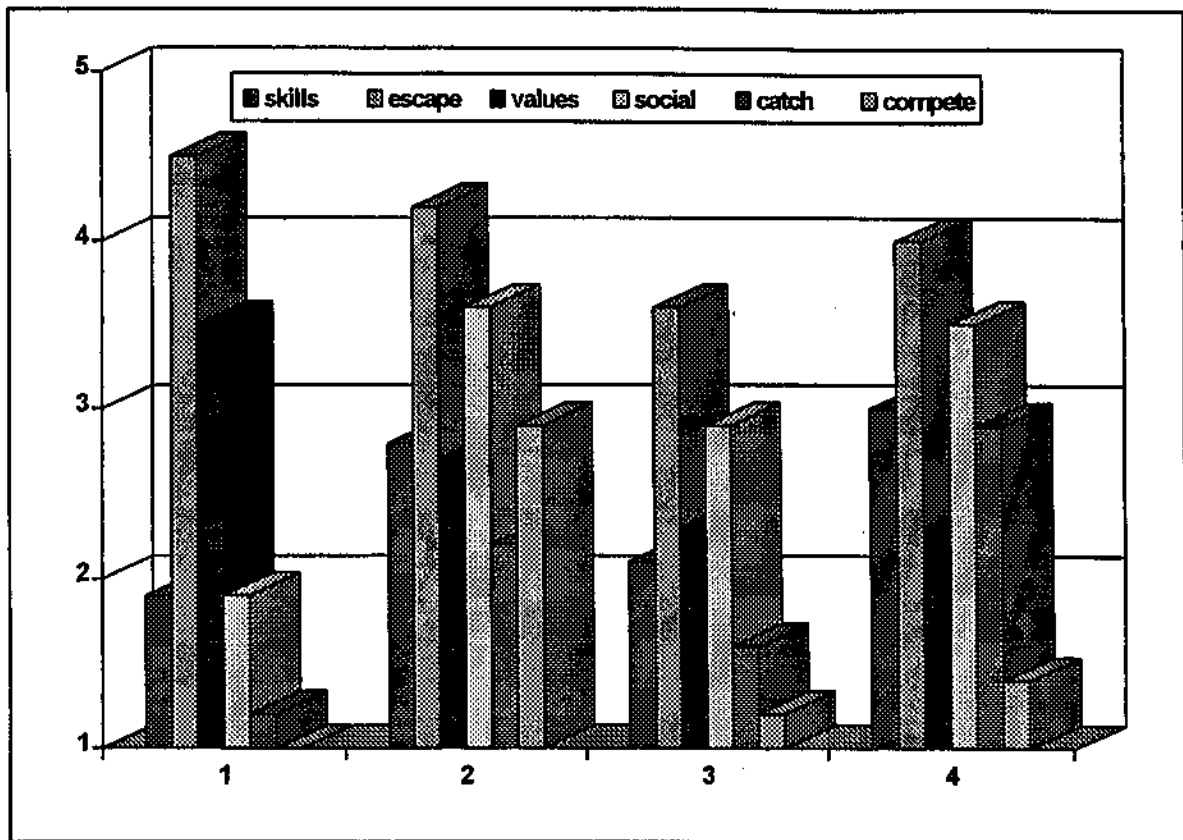


Figure 20. Comparisons of factor scale means for the four types of inactive anglers.

Segmentation Validation

Each of the four angler types (active and inactive) make sense and are consistent with those obtained in similar studies (Sanyal and McLaughlin 1992a). However, more information is needed to describe and validate these types. If the types do not differ in other meaningful and managerially-relevant ways, then the typology would not be as useful.

Tables 12 and 13 show how the angler types compared on several study variables. The results are not only consistent with the general descriptions above but also add to the information contained in the type descriptions, suggesting that the types are a useful way to categorize people who fish in Idaho. Only

statistically significant differences are discussed (ANOVA with LSD multiple range test or Kruskal-Wallis one-way ANOVA with paired Mann-Whitney U tests).

Table 12. Segment validation: Comparison of active angler types using salient behavioral, preference, and demographic variables.

VARIABLE	ACTIVE ANGLER TYPE			
	1 (29%)	2 (3%)	3 (53%)	4 (6%)
Types of fishing				
Percent who:				
Ice fish	41.2	42.9	29.0	52.0
Fly fish	60.3	57.1	52.0	44.0
Bait fish	90.4	92.9	84.7	84.0
Fish from a boat or raft	81.6	92.9	76.6	88.0
Fish from shore	91.9	92.9	81.9	80.0
Use a float tube	19.1	25.0	14.3	20.0

Type 3 anglers were less likely to ice fish, to fish from the shore or to use a float tube, suggesting lower levels of specialization as a group. The low affinity for shore fishing was shared with Type 4 anglers.

Fishing companions

Percent who:

Fish alone	78.8	85.7	33.9	36.0
Fish with friends	82.5	100.0	74.6	92.0
Fish with their children	58.4	64.3	55.2	56.0
Fish with their parents	29.9	50.0	24.2	52.0
Fish with siblings	29.9	57.1	23.4	56.0
Fish with their spouse	46.0	42.9	55.2	56.0
Fish with other relatives	26.3	35.7	19.0	24.0

Anglers in type 3 or 4 were much less likely to fish alone. Fishing with parents and siblings was less typical of the majority groups (1 and 3) than it was for the others.

<u>VARIABLE</u>	<u>ACTIVE ANGLER TYPE</u>			
	1 (29%)	2 (3%)	3 (53%)	4 (6%)
Fishing Frequency				
Year of initiation (mean)	1960	1961	1958	1965
Days fished per year	11-20	21-30	11-20	21-30
Percent who:				
Fish only 1-3 days/year	3.6	0.0	4.5	0.0
31+ days per year	32.8	57.1	29.0	52.0
<i>Type 3 anglers began fishing earlier (they were also older: see Demographics)</i>				
<i>but fished fewer days each year than did the more specialized Types 2 and 4.</i>				
Satisfaction				
Percent who "strongly agree" or "agree" with:				
Thoroughly enjoy fishing	93.4	92.3	91.6	92.3
Fishing not as enjoyable as expected	2.9	0.0	2.8	0.0
Cannot imagine better recreation	32.8	50.0	31.3	34.6
Disappointed with some aspects of fishing	47.4	64.3	51.0	38.5
Worth the time and money	90.5	100.0	81.1	80.8
Rating of IDFG fish management				
Average "grade" ²	2.5	3.0	2.6	2.5
Average Skill level ³	3.5	3.9	3.4	3.7
Percent who always have an enjoyable time when fishing at:				
Mountain lake	41.2	45.5	37.8	26.1
Lake	27.0	7.1	21.5	19.2
Reservoir	20.2	15.4	16.5	30.4
River	35.1	50.0	29.8	30.8
Mountain stream	48.5	41.7	39.6	44.0

² 1 = Excellent (A); 2 = Good (B); 3 = Fair (C); 4 = Poor (D); 5 = Very Poor (F).

³ 1 = Beginner — 5 = Expert.

Type 3 anglers have a slightly lower satisfaction level than the other 3 types. This may be related to their lower skill level (shared with type 1) or may be related to the fact that Types 2 and 4 are more actively seeking their more specialized opportunities: Lakes provide the least enjoyment to Type 4's: surprising, since they are most motivated to seek social bonding and are least motivated by solitude. Type three anglers, on the other hand are least happy with reservoir fishing.

<u>VARIABLE</u>	<u>ACTIVE ANGLER TYPE</u>			
	1 (29%)	2 (3%)	3 (53%)	4 (6%)
Consequences of not fishing				
Percent who would:				
Not miss it at all	0.0	0.0	2.0	0.0
Miss it a little	5.1	7.1	6.1	3.8
Miss it some	11.7	7.1	13.4	23.1
Miss it considerably	29.2	21.4	30.0	11.5
Miss it a great deal	54.0	64.3	48.6	61.5
<i>Angling is valued equally by all four active angler types.</i>				
Demographics				
Average age	39.2	37.4	41.2	35.4
Percent who are:				
Male	92.6	92.9	88.4	100.0
Married	73.0	71.4	78.0	80.8
Belong to conservation, environmental or sportsman's organization	50.7	38.5	35.2	23.1
Employed full-time	84.7	85.7	76.0	88.5
Employed part-time	8.8	7.1	15.6	3.8
Unemployed	3.6	14.3	2.8	3.8
Retired	5.1	0.0	5.7	7.7
Homemakers	2.2	0.0	3.3	0.0
Students	3.6	0.0	3.7	3.8
Have children	72.3	71.4	82.2	73.1
Average number of children	3.4	1.6	2.8	2.0
Percent of children who are active anglers	77.7	60.0	76.4	75.7
Family income category	\$30- 35,000	\$30- 35,000	\$30- 35,000	\$30- 35,000

Type 3 anglers are older, and along with type 4 are more likely to be married and less likely to belong to a conservation organization. Type 3's are also less likely to be employed full-time and more likely to have children, suggesting that type 3's are less active and specialized. Type 3 also has a slightly higher percentage of female anglers.

Table 13. Segment validation: Comparison of inactive angler types using salient behavioral, preference, and demographic variables.

<u>VARIABLE</u>	INACTIVE ANGLER TYPES			
	1 (7%)	2 (15%)	3 (59%)	4 (19%)
Types of fishing				
Percent who used to:				
Ice fish	21.4	17.9	9.8	17.1
Fly fish	50.0	32.1	22.3	20.0
Bait fish	64.3	82.1	79.5	74.3
Fish from a boat or raft	42.9	57.1	55.4	68.6
Fish from shore	78.6	92.9	82.1	88.6
Use a float tube	14.3	7.1	6.3	11.4
Fishing companions				
Percent who used to:				
Fish alone	71.4	39.3	29.5	17.1
Fish with friends	64.3	75.0	61.6	54.3
Fish with their children	35.7	64.3	51.8	45.7
Fish with siblings	14.3	39.3	22.3	28.6
Fish with their parents	35.7	35.7	20.5	40.0
Fish with their spouse	42.9	85.7	55.4	65.7
Fish with other relatives	21.4	28.6	17.0	34.3
Fishing Frequency				
Year of initiation (mean)	1960	1960	1962	1965
Days fished per year	4-10	11-20	4-10	11-20
Percent who used to:				
Fish only 1-3 days/year	14.3	21.4	25.7	12.1
Fished 31+ days per year	14.3	28.6	8.3	24.2

Types 1 and 3 fished for fewer days each year and were less likely to have fished for more than one month each year.

VARIABLE	INACTIVE ANGLER TYPES			
	1 (7%)	2 (15%)	3 (59%)	4 (19%)
Satisfaction				
Percent who "strongly agree" or "agree" with:				
Thoroughly enjoyed fishing	78.6	92.9	81.1	94.3
Fishing not as enjoyable as expected	14.3	17.9	9.8	28.6
Cannot imagine better recreation	35.7	39.3	31.3	41.2
Disappointed with some aspects of fishing	21.4	42.9	33.0	42.9
Worth the time and money	78.6	85.7	75.5	74.3
Rating of IDFG fish management				
Average "grade" ⁴	3.1	2.5	2.4	2.7
Average Skill level ⁵	3.0	3.1	2.6	2.7
Percent who always had an enjoyable time when fishing at:				
Mountain lake	63.6	36.0	33.3	39.1
Lake	45.5	19.2	18.6	52.0
Reservoir	33.3	11.5	14.7	28.1
River	63.6	36.0	22.2	33.3
Mountain stream	76.9	40.9	30.0	40.0

Type 4's, despite thoroughly enjoying fishing, appear less likely to have fishing meet their expectations than the others. They also were more likely to have been disappointed with some aspects of fishing, and were less likely to agree that fishing was worth the time and money. Type 3's were more likely to consider fishing "worth the time and money." These levels of satisfaction are all lower than for active anglers.

Type 3 had lower overall skill levels than the others — a fact that may account for their lowered levels of enjoyment at all types of fishing waters.

⁴ 1 = Excellent (A); 2 = Good (B); 3 = Fair (C); 4 = Poor (D); 5 = Very Poor (F).

⁵ 1 = Beginner — 5 = Expert.

VARIABLE	INACTIVE ANGLER TYPES			
	1 (7%)	2 (15%)	3 (59%)	4 (19%)
Consequences of no longer fishing				
Percent who do:				
Not miss it at all	22.2	8.0	7.3	3.4
Miss it a little	22.2	0.0	11.5	6.9
Miss it some	22.2	24.0	44.8	27.6
Miss it considerably	22.2	20.0	21.9	34.5
Miss it a great deal	11.1	48.0	14.6	27.6
<p><i>Though not approaching the levels of attachment that active anglers have, most (i.e., type 3) inactive anglers miss fishing "some", while Type 4 anglers miss fishing the most and type 1's are least attached to the sport.</i></p>				
Demographics				
Average age	45.5	43.4	45.0	42.5
Percent who are:				
Male	78.6	50.0	59.1	42.9
Married	50.0	82.1	81.8	73.5
Belong to conservation, environmental or sportsman's organization	21.4	8.0	8.3	17.1
Employed full-time	58.3	76.2	71.1	62.1
Employed part-time	16.7	9.5	11.1	13.8
Unemployed	8.3	0.0	3.3	0.0
Retired	16.7	9.5	8.9	6.9
Homemakers	8.3	19.0	10.0	13.8
Students	25.0	0.0	3.3	17.2
Have children	36.4	60.0	61.5	63.4
Average number of children	2.2	2.0	2.4	2.6
Percent of children who are active anglers	75.0	79.9	51.7	71.4
Family income category	\$20- 25,000	\$25- 30,000	\$30- 35,000	\$25- 30,000

Type 1's were predominantly male and less likely to be married.

CHAPTER 7: PERCEIVED AVAILABILITY OF DESIRED OPPORTUNITIES

These series of 27 paired figures (Figures 21 through 47) illustrate active and inactive angler perceptions about the importance and availability of specific fishing opportunities in Idaho. The opportunities are those that were used to perform the market segmentation of the two populations. Importance was measured along a 5-point interval scale that ranged from *Not Important* to *Extremely Important*. Availability was measured using a similar scale: *Not Available* to *Extremely Available*. The comparisons are made using angler type as the independent variable. It is important to remember that the angler types (i.e., types 1 through 4) are merely names and not definitive descriptors, and therefore it is not possible for active angler Type 1 to be compared to inactive Type 1 anglers. The true and complete identity of each type can only be inferred from Tables 7 and 10.

In each figure the dark shaded areas between the traces indicate that importance is rated higher than availability, and is used to infer a "deficit" of that opportunity. Clear space between the traces, indicating that availability was rated higher than importance, is used to infer a "surplus" of that opportunity.

Two major conclusions relative to explaining why some anglers remain active while others drop out are evident from these figures. First, inactive anglers see a greater overall deficit than do active anglers. In most cases the deficit results not from low perceptions of availability of the opportunity, but rather from an increased importance placed on the opportunity. Second, deficits in supply are more likely to occur in the human science areas (tranquillity, experiencing nature, escape, etc.) than in the traditional biological resources areas of angling opportunities. These biological factors are, as has been pointed out (Table 5), not the major motivators of angling. Not only are active anglers cognizant of the excess attention paid to fish abundance and availability, but

they too recognize shortfalls in human and personal factors. This also provides graphic corroboration of the outstanding job that the agency is doing relative to its biological mission. But it appears that future excellence in resource and angler management will best be gained with the help of the human sciences.

A couple of key points must be made about this analysis. Type 3 active anglers, who make up over half of the active anglers, only report three deficits—opportunities for getting away from daily demands, being in natural settings and tranquillity. While this may seem like a short list, it does include the three major motivators of angling. Type 1 active anglers report only a deficit for opportunities to be alone, another critical motivator. Most deficits for active anglers are for type 2 anglers, the most complex but least numerous type of angler.

In Chapter 9, the evidence on reasons for activity persistence also highlights this finding, namely it is areas of the human sciences that appear to be dominant in explaining a persons relationship toward angling.

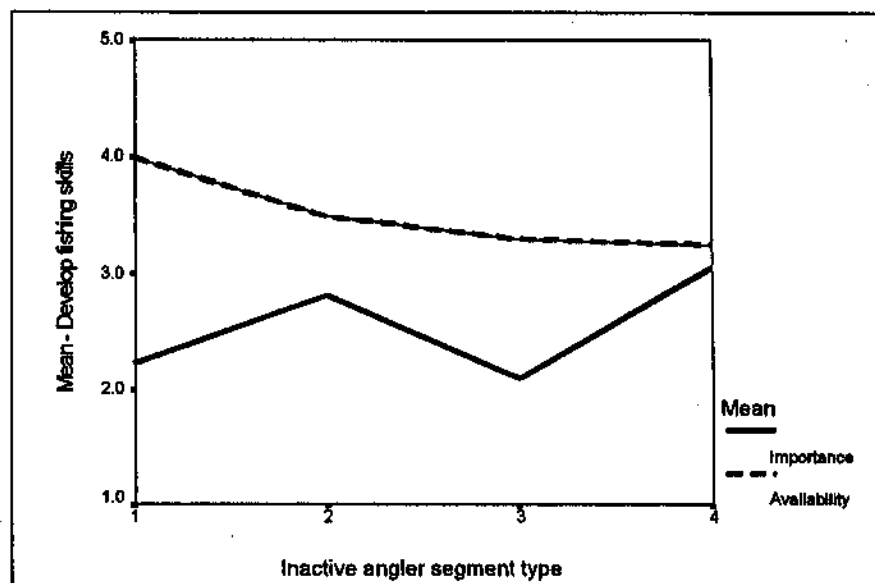
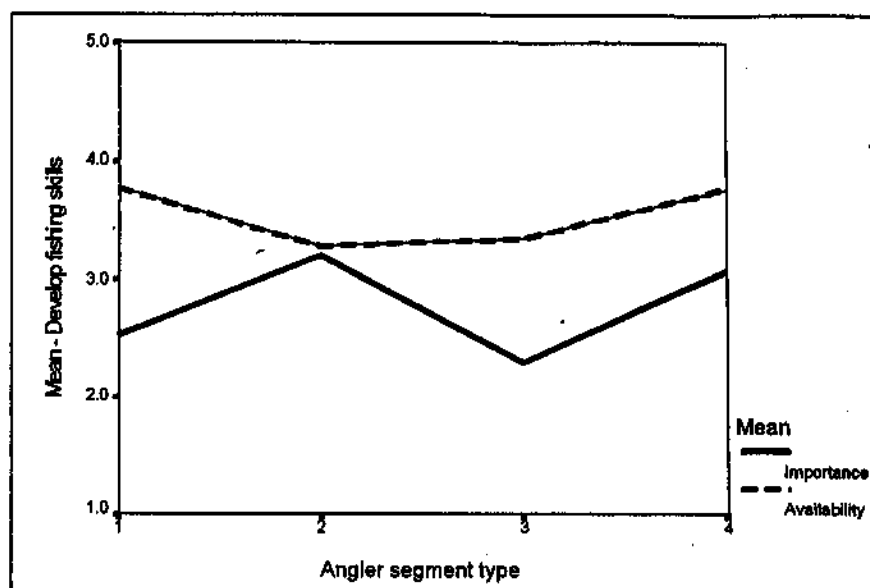


Figure 21. Importance and availability of developing and using fishing skills.

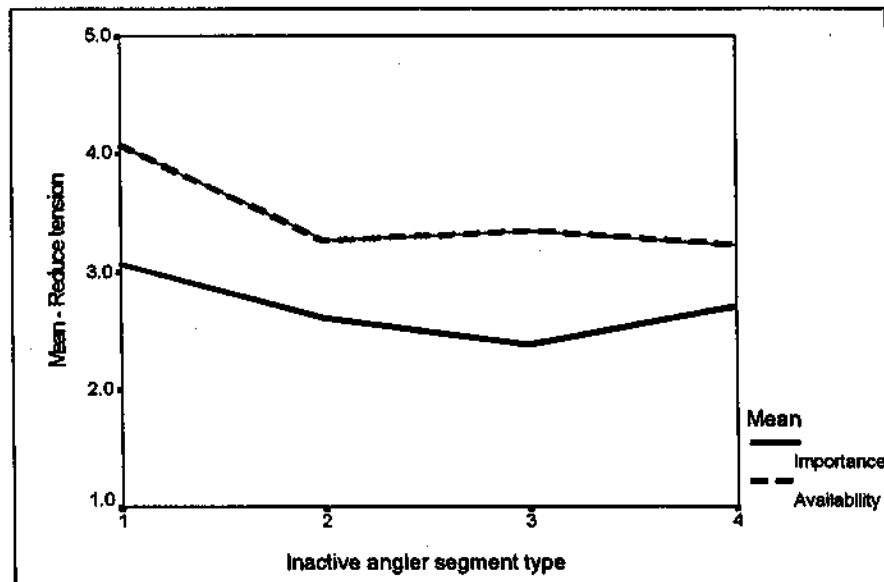
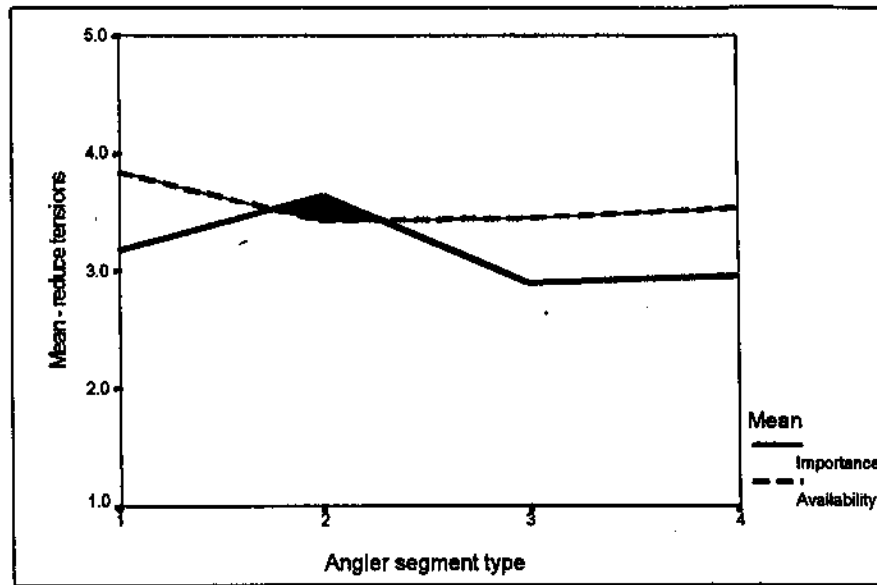


Figure 22. Importance and availability of reducing tensions.

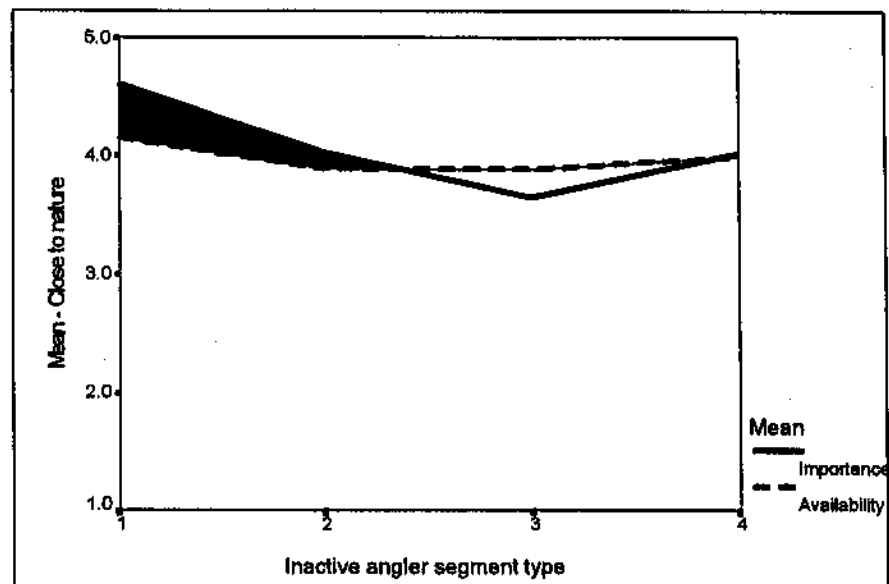
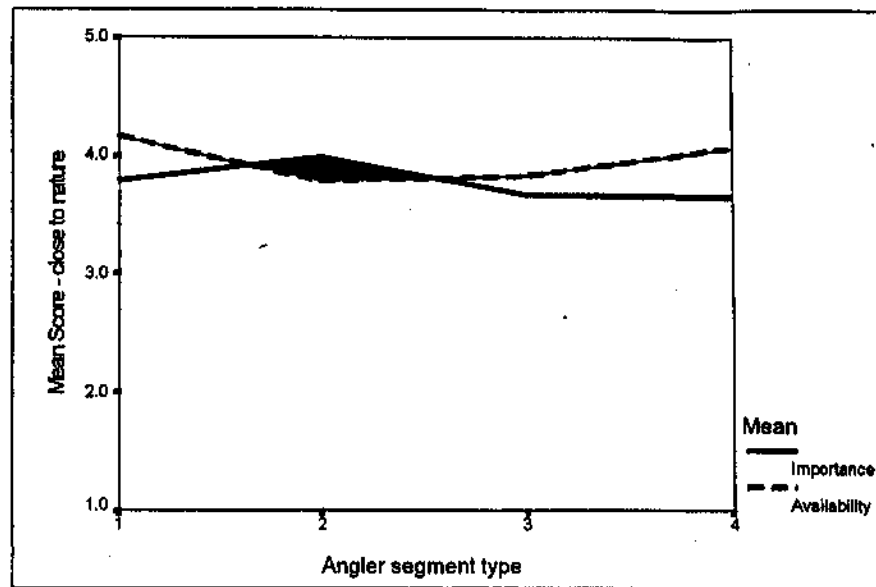


Figure 23. Importance and availability of being close to nature.

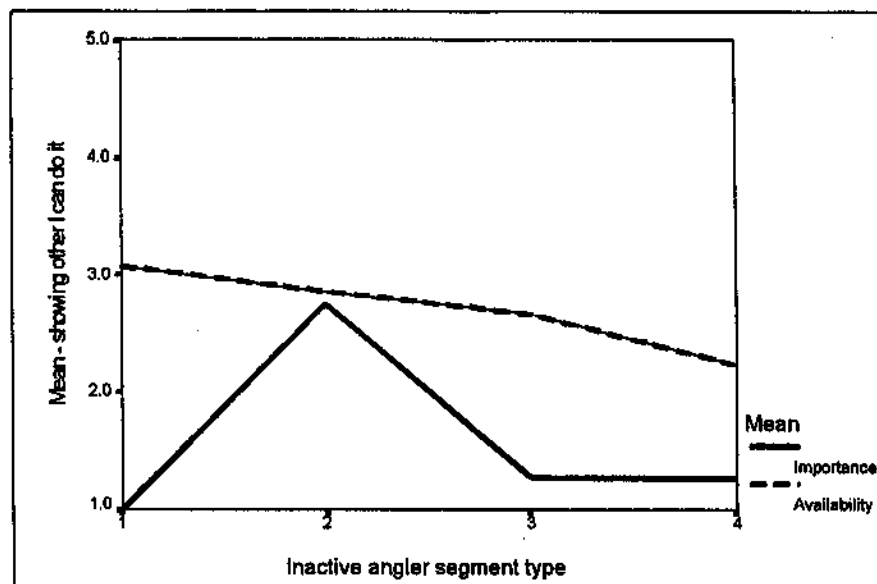
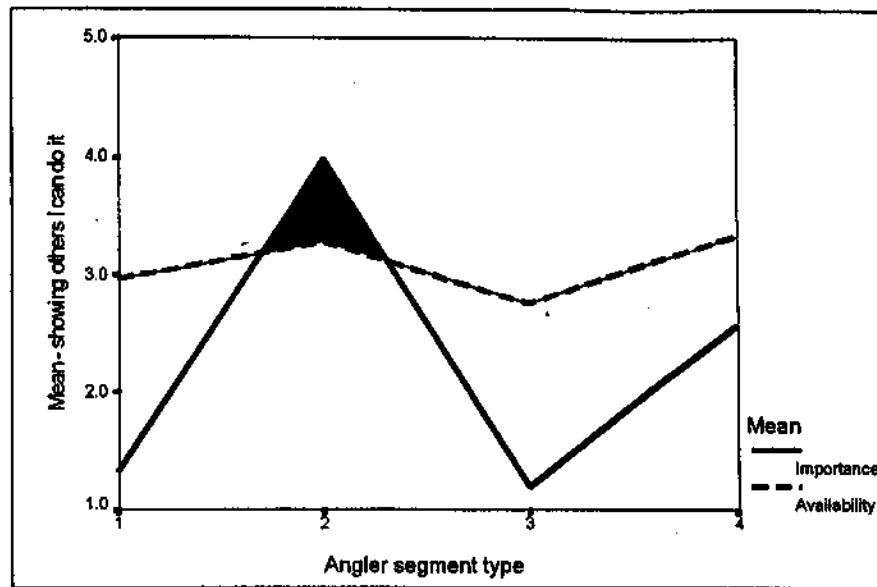


Figure 24. Importance and availability of showing others.

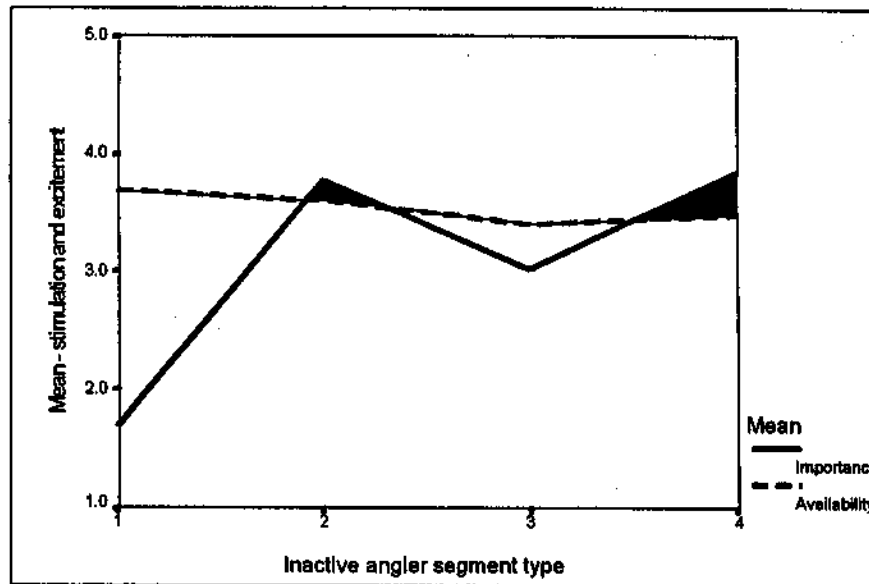
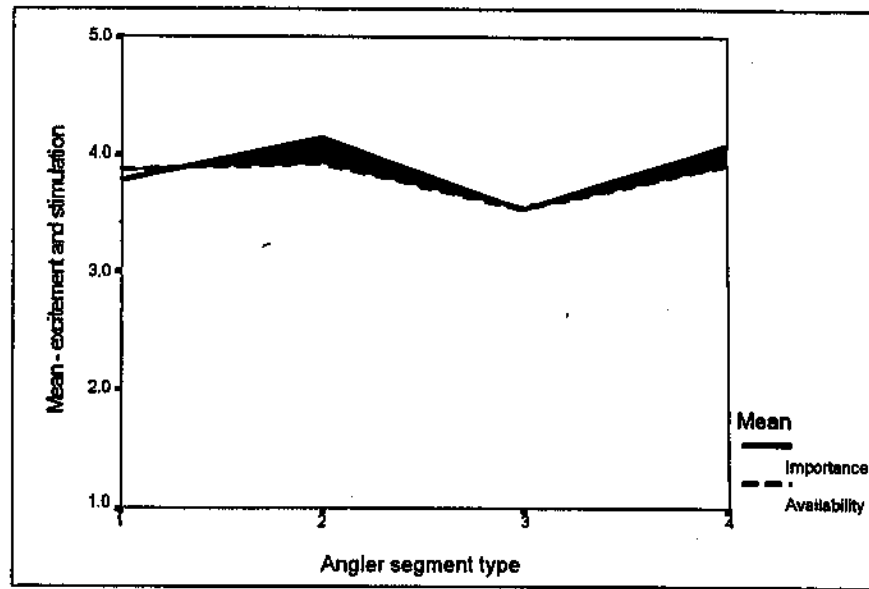


Figure 25. Importance and availability of excitement and stimulation.

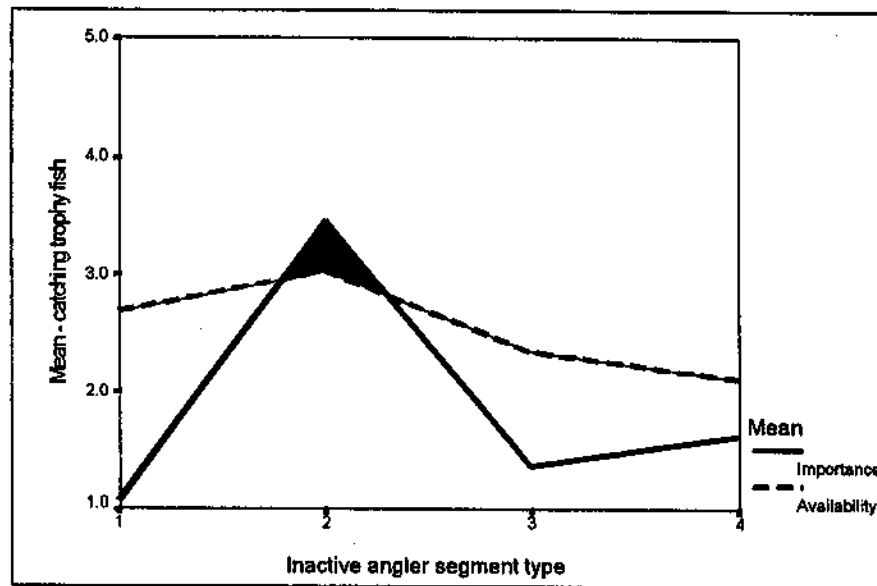
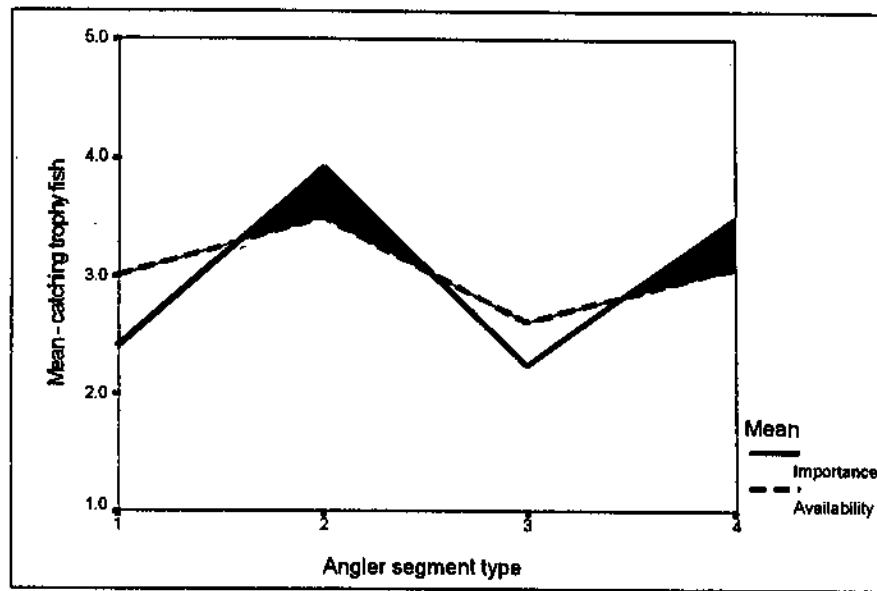


Figure 26. Importance and availability of catching trophy fish.

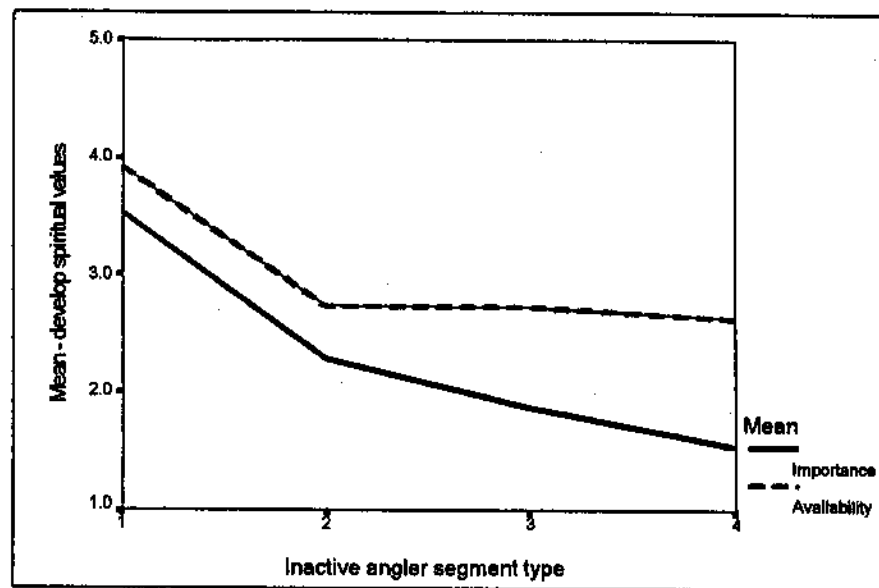
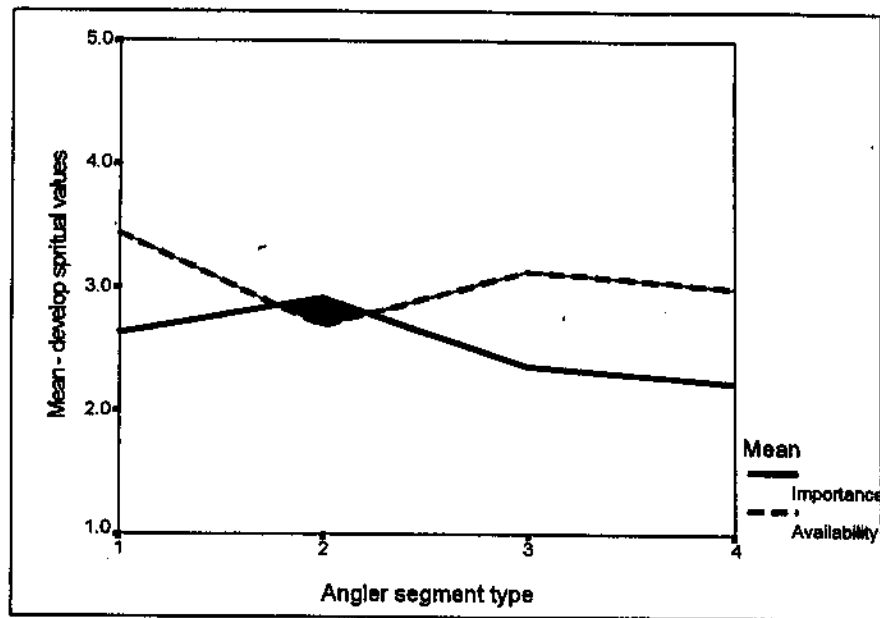


Figure 27. Importance and availability of developing spiritual values.

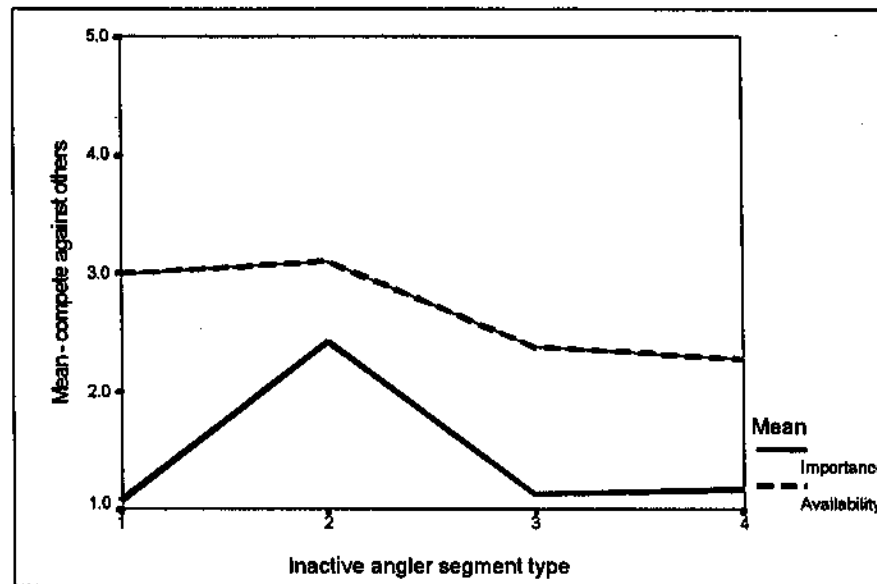
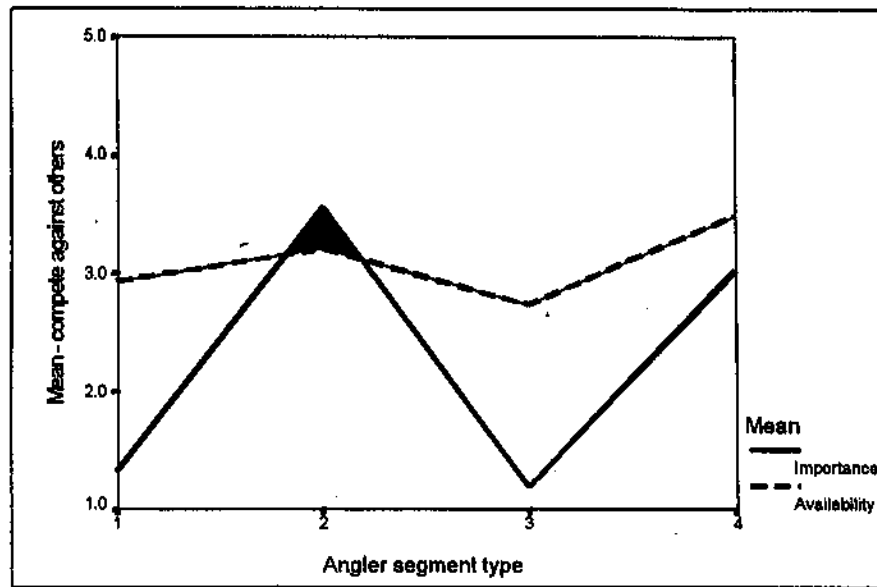


Figure 28. Importance and availability of competing against other anglers.

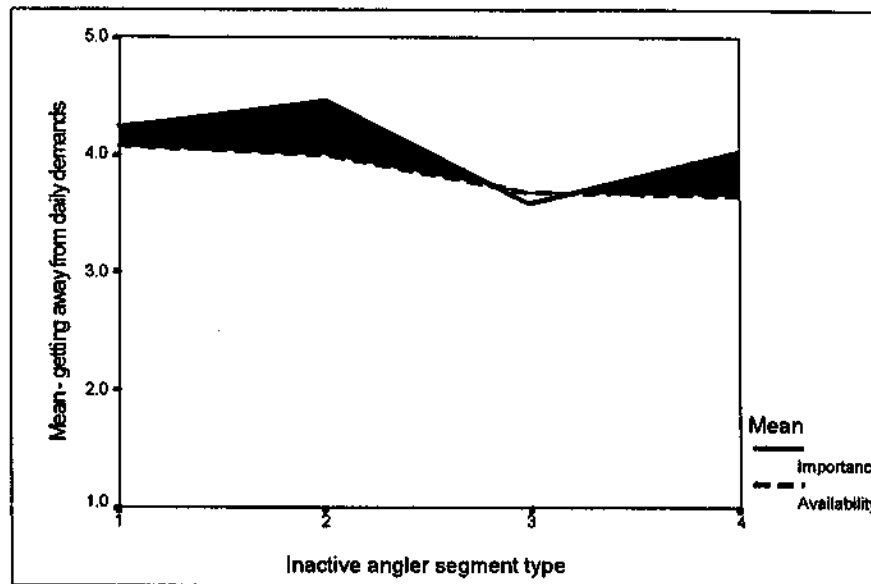
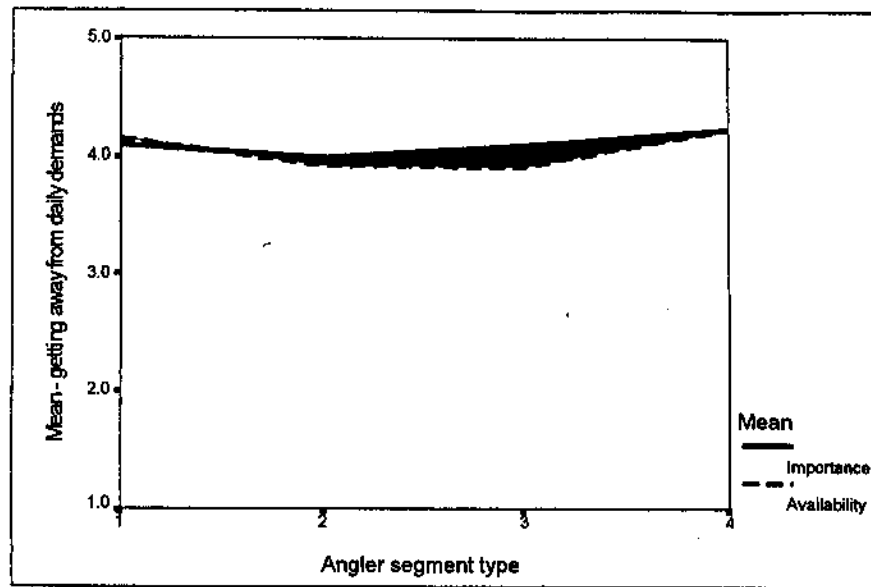


Figure 29. Importance and availability of getting away from daily demands.

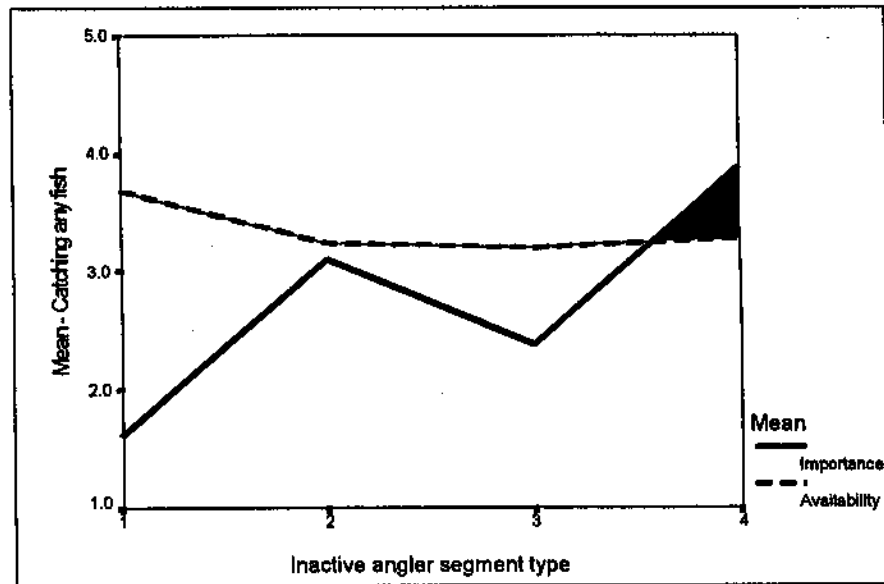
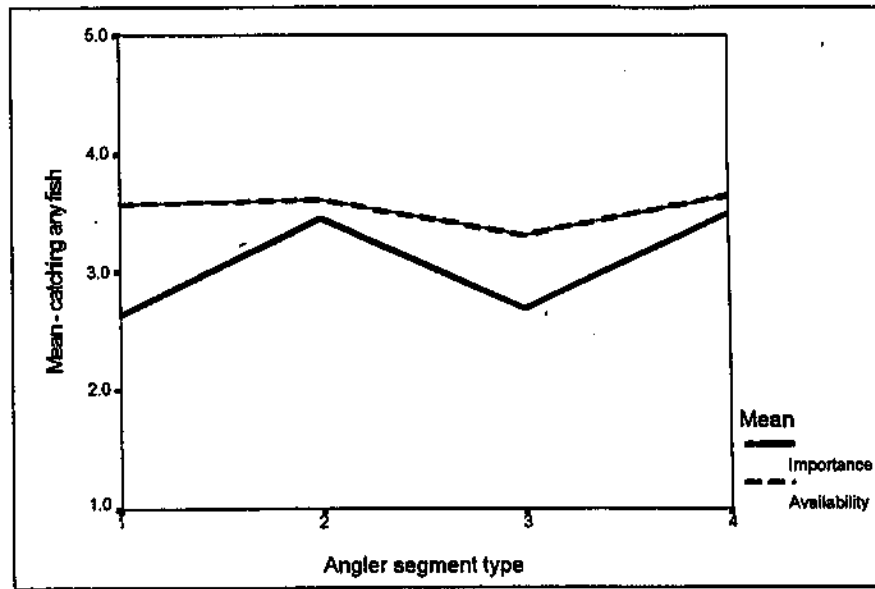


Figure 30. Importance and availability of catching any fish.

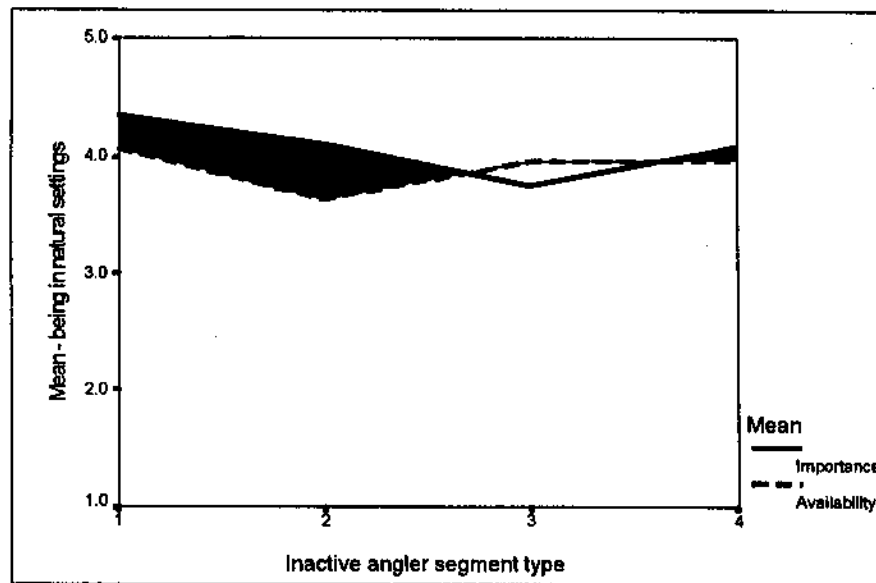
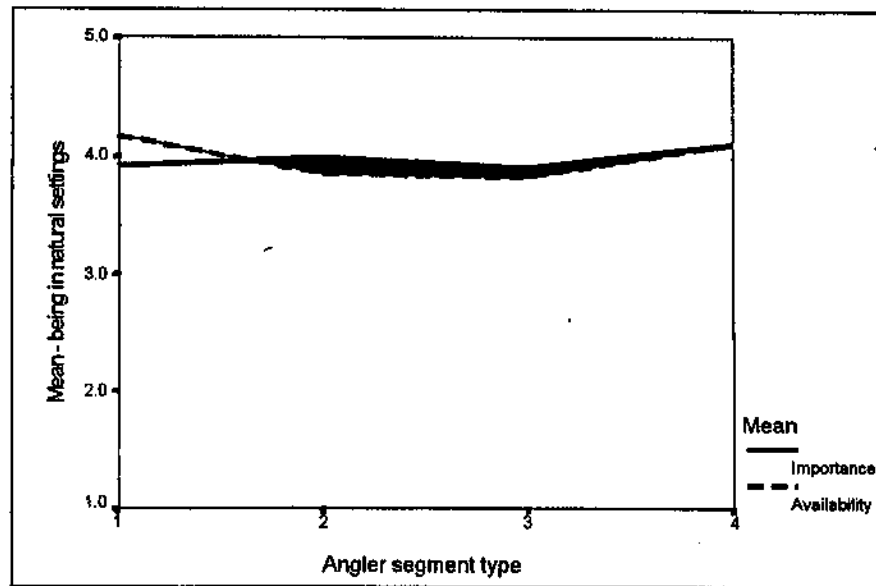


Figure 31. Importance and availability of being in natural settings.

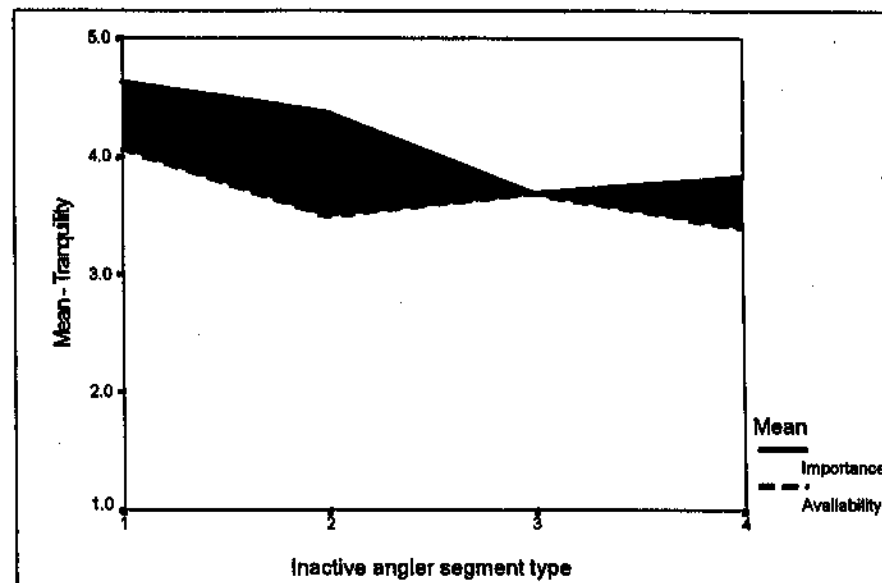
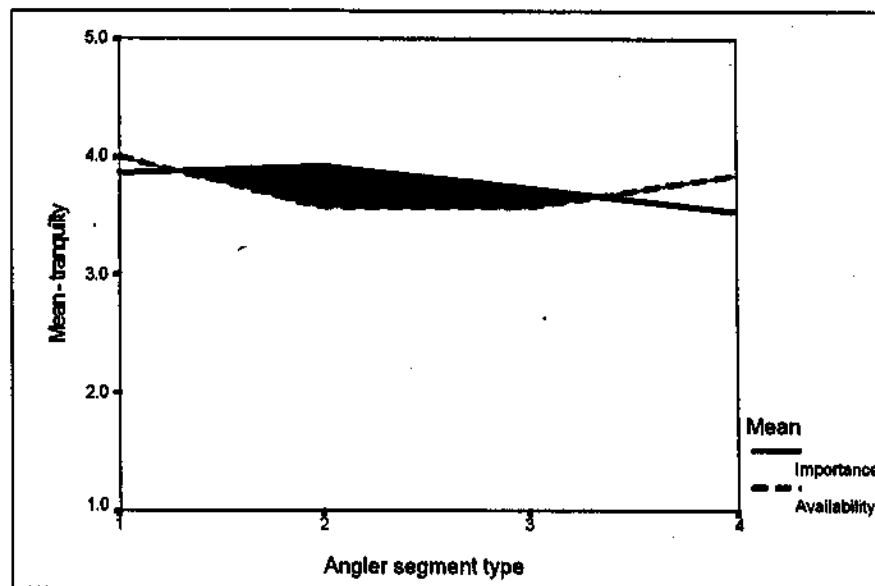


Figure 32. Importance and availability of experiencing tranquillity.

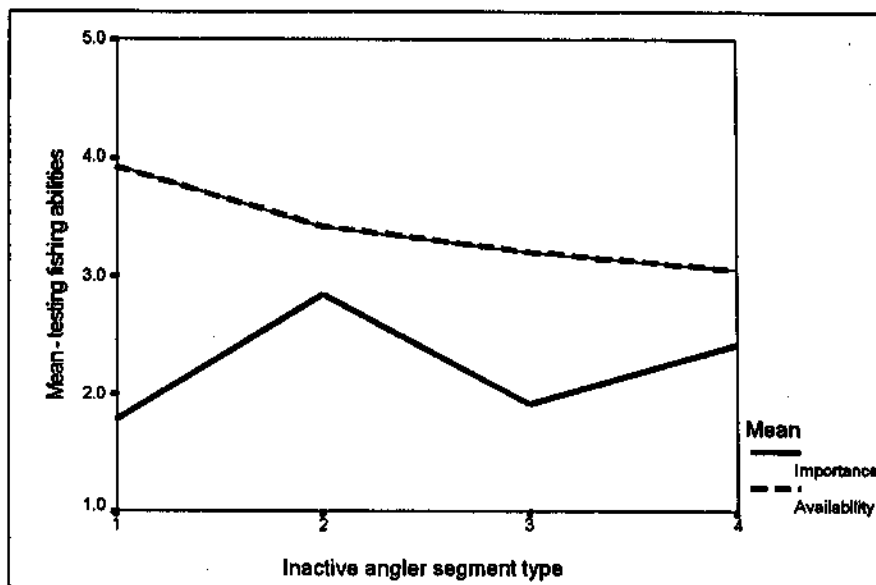
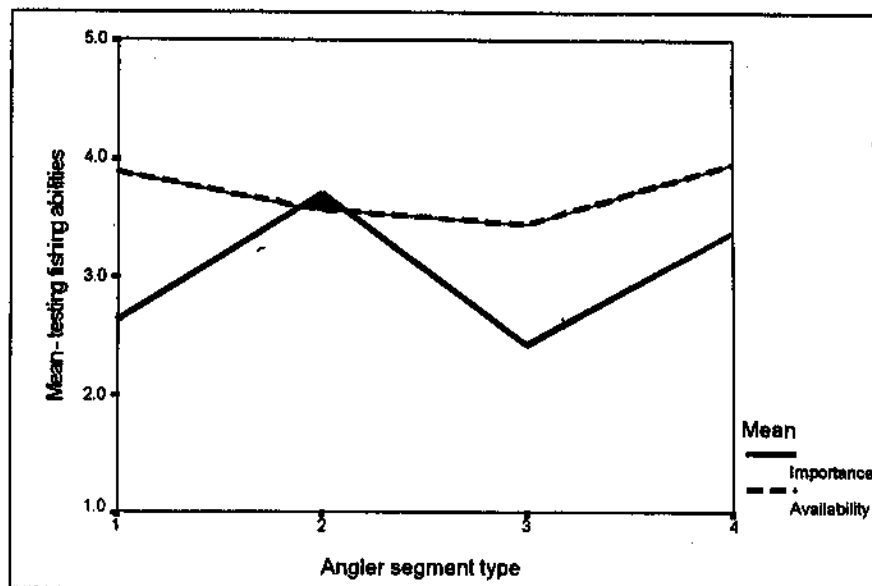


Figure 33. Importance and availability of testing fishing abilities.

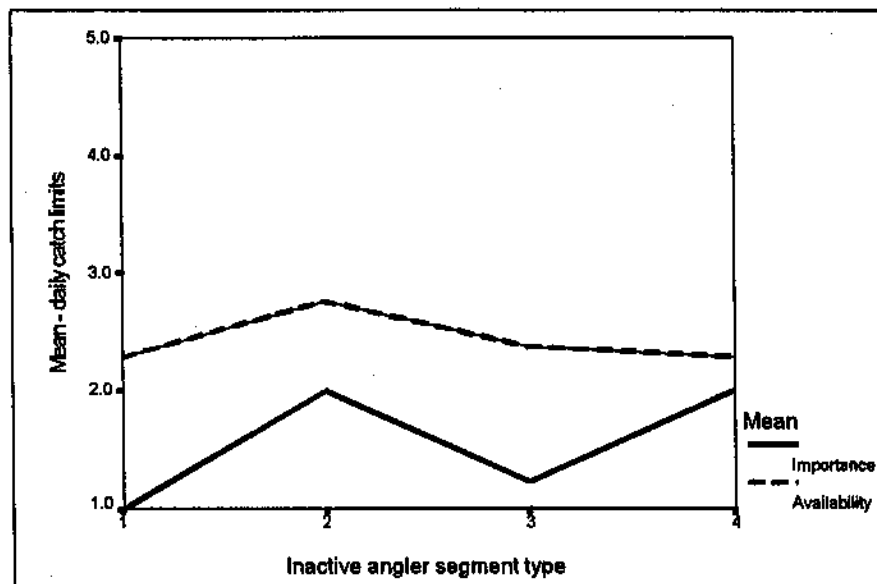
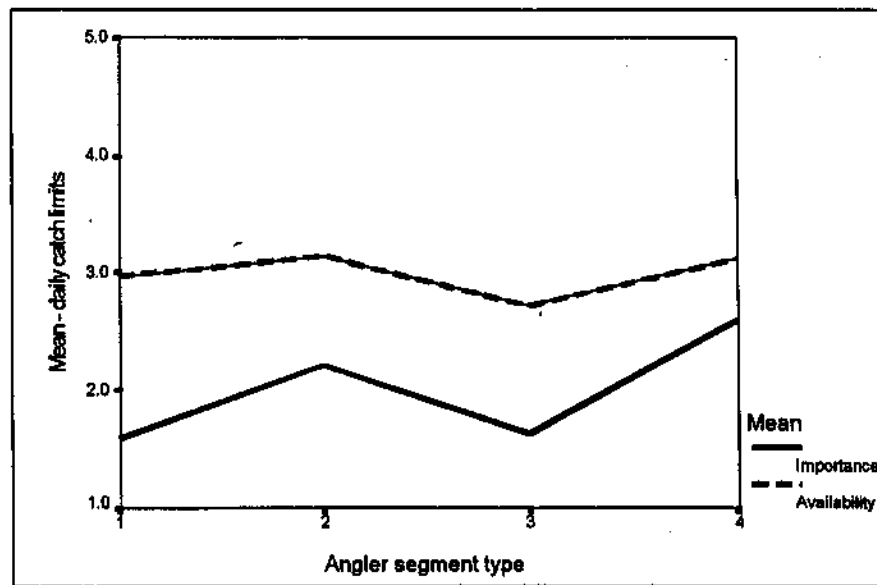


Figure 34. Importance and availability of catching daily bag limits.

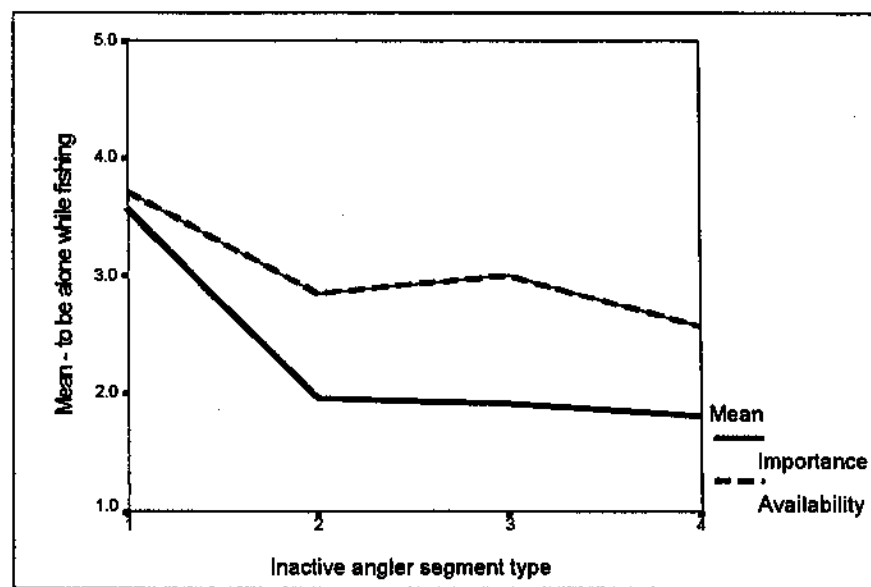
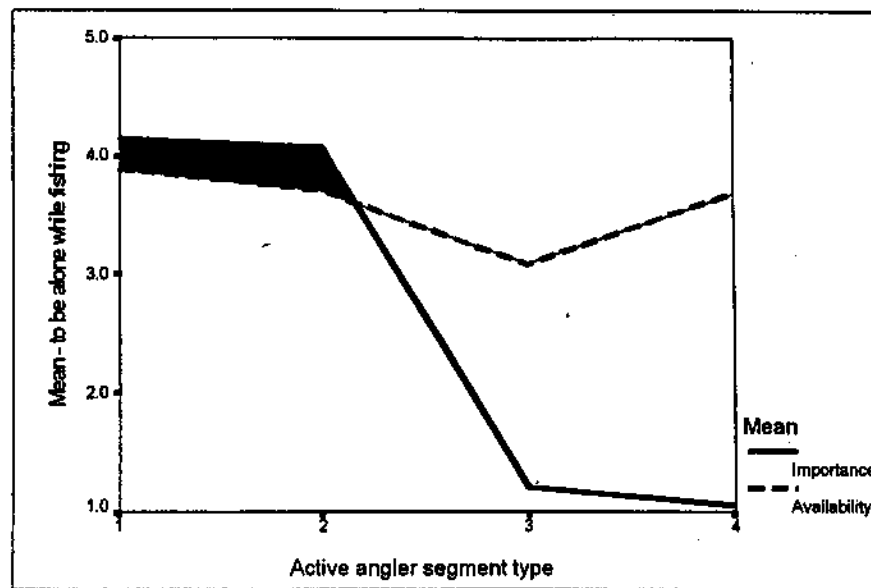


Figure 35. Importance and availability of being alone while fishing.

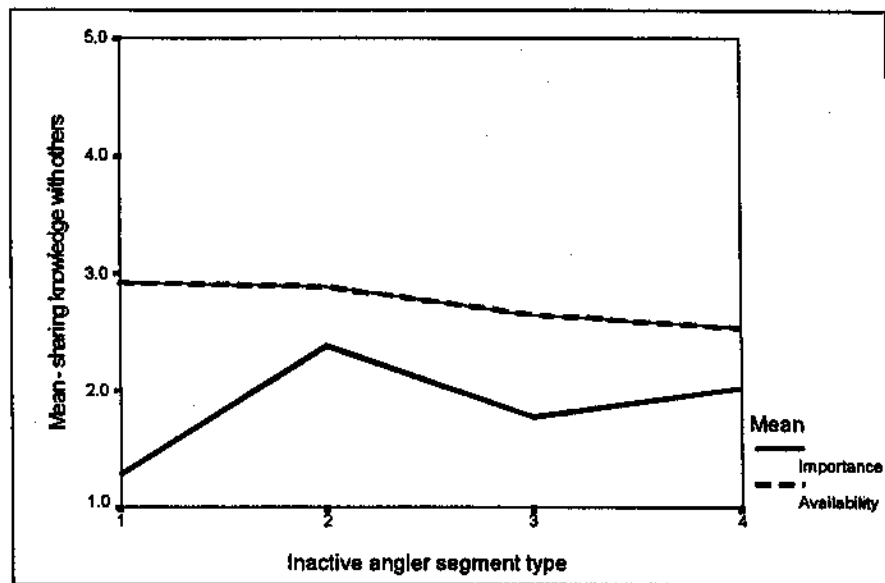
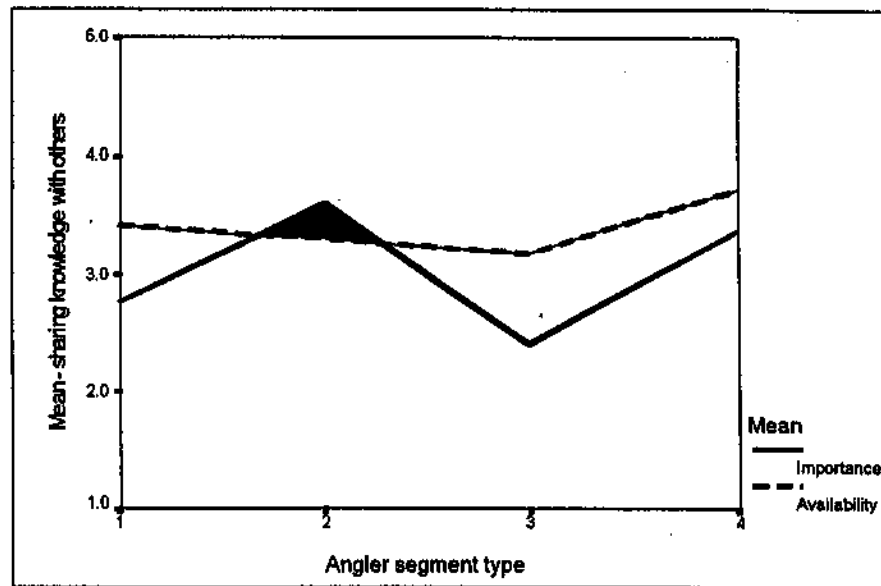


Figure 36. Importance and availability of sharing knowledge with others.

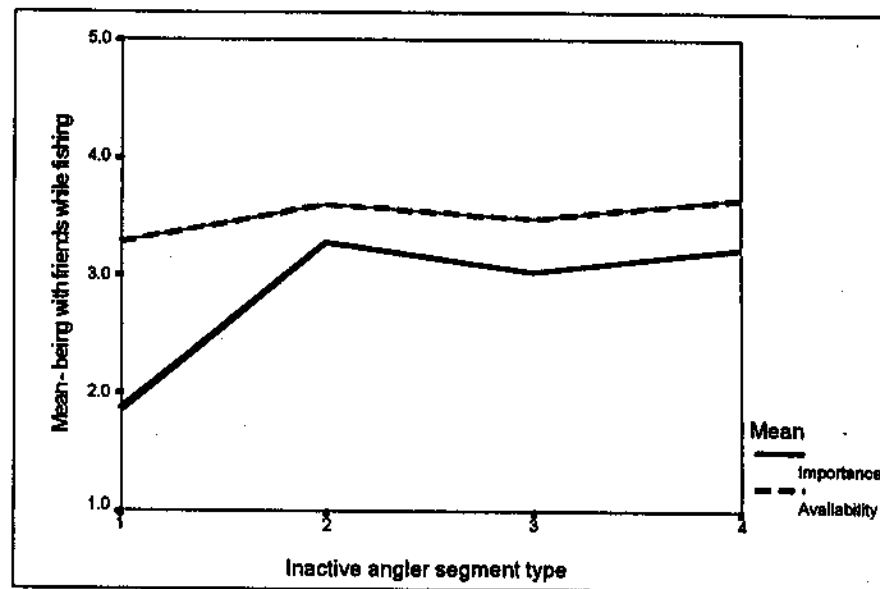
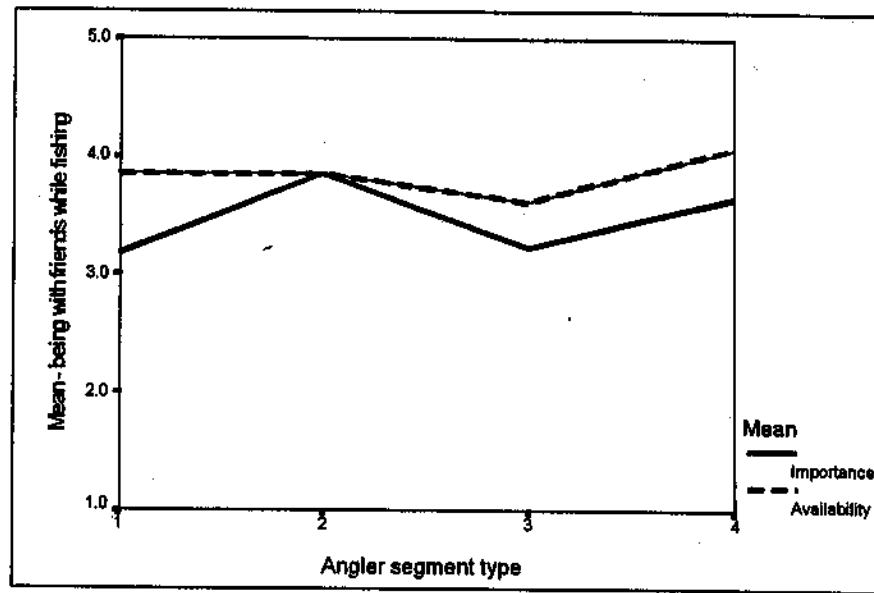


Figure 37. Importance and availability of being with friends.

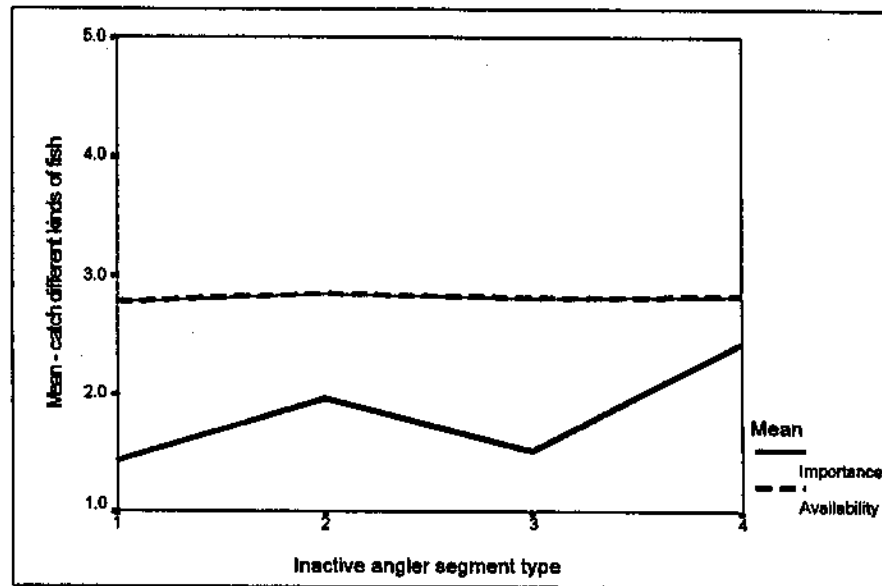
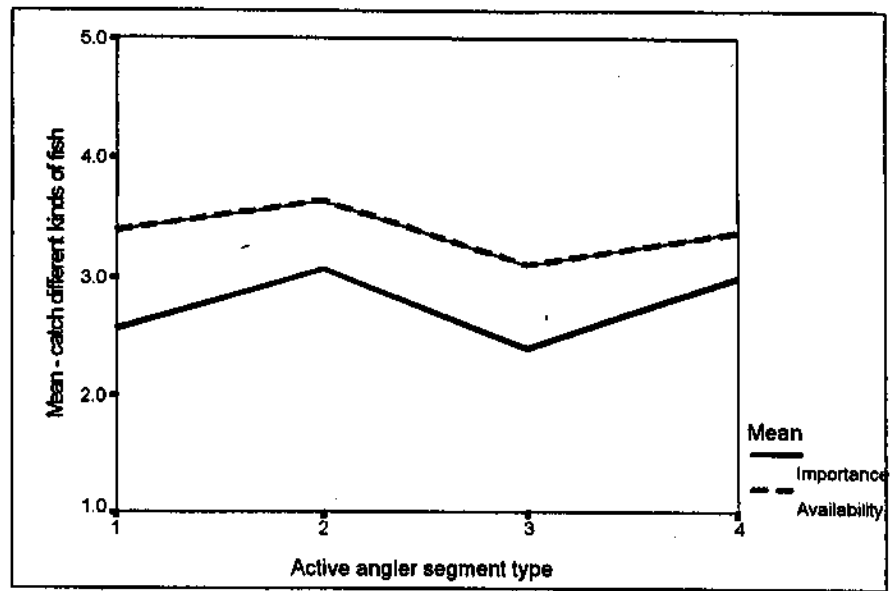


Figure 38. Importance and availability of catching different kinds of fish.

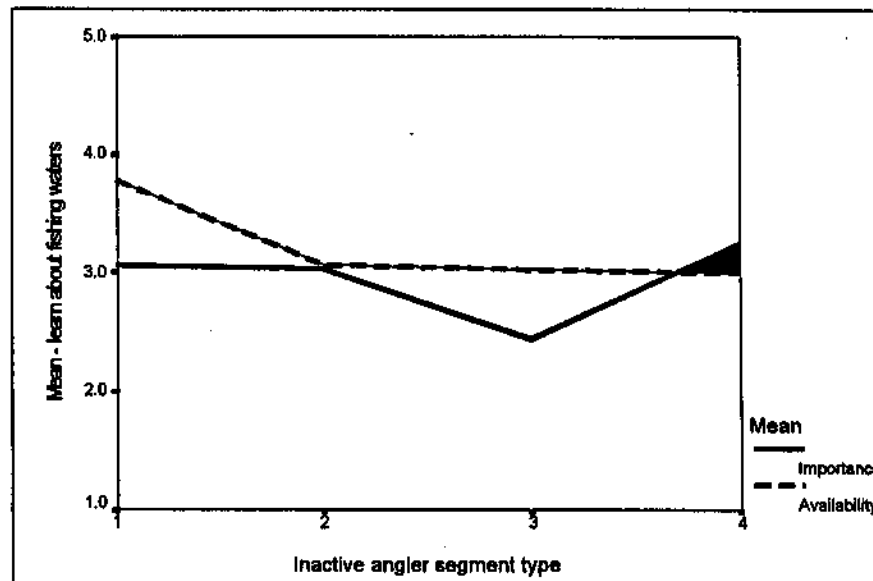
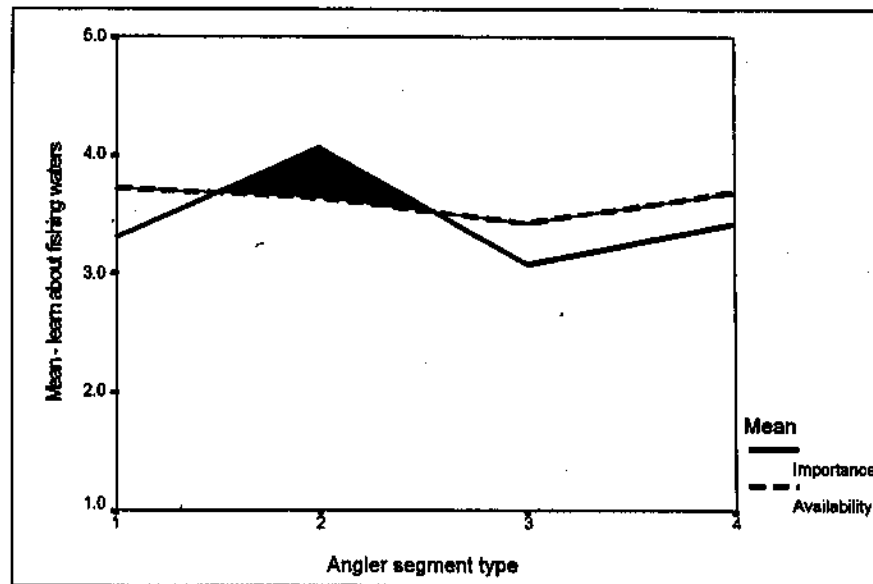


Figure 39. Importance and availability of learning about fishing waters.

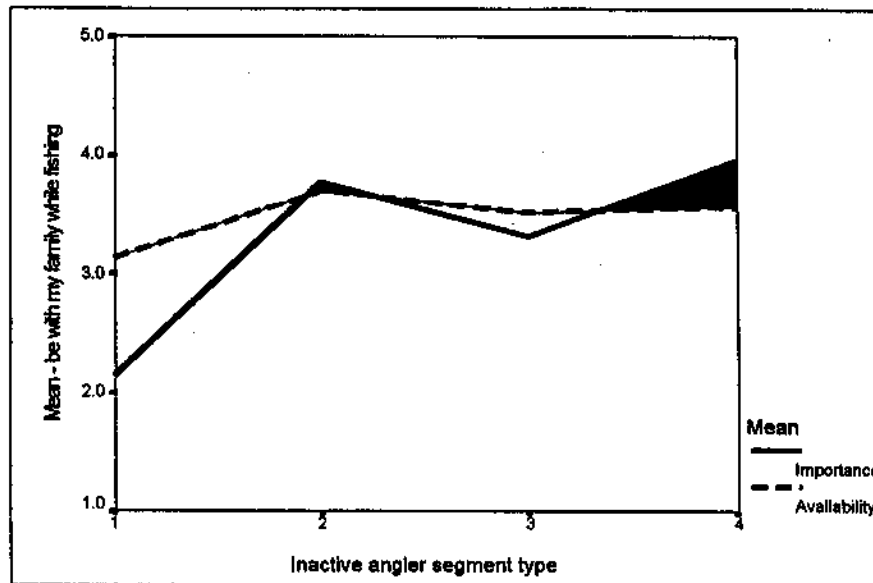
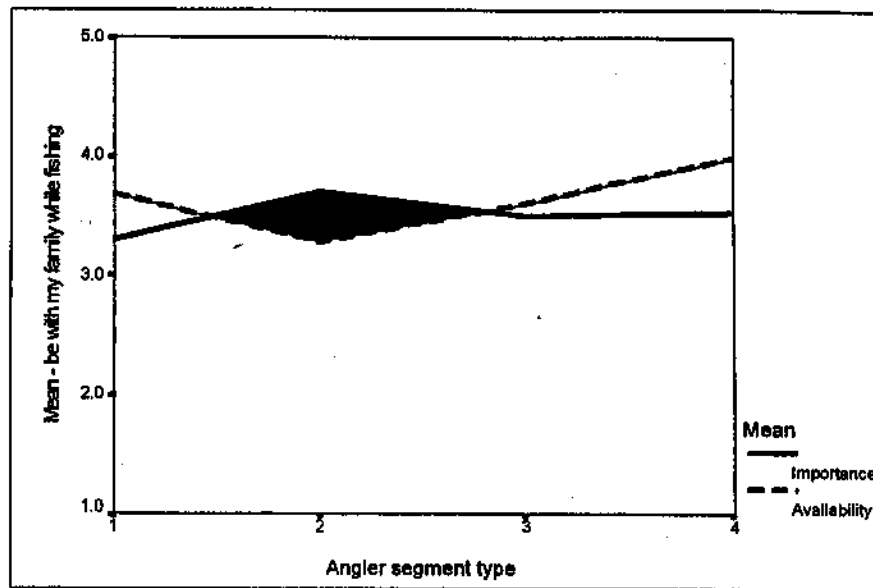


Figure 40. Importance and availability of being with family.

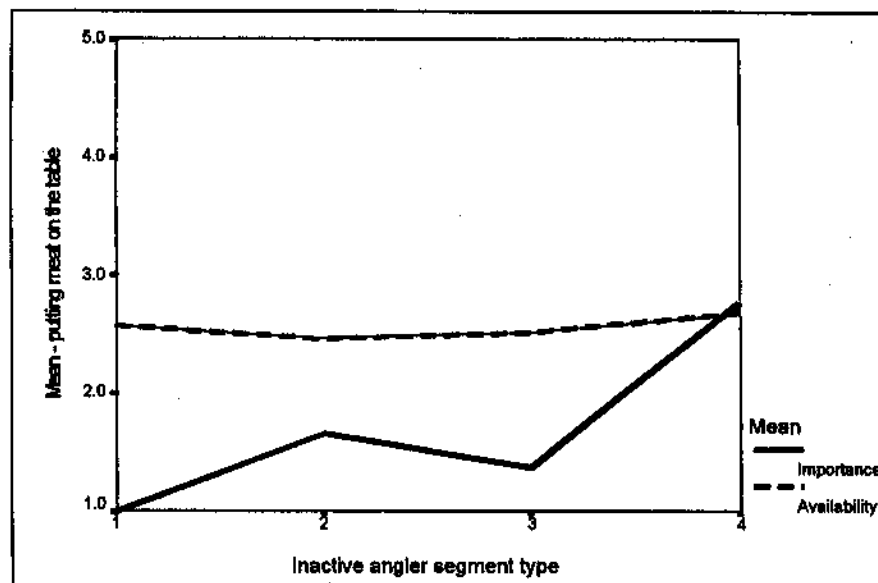
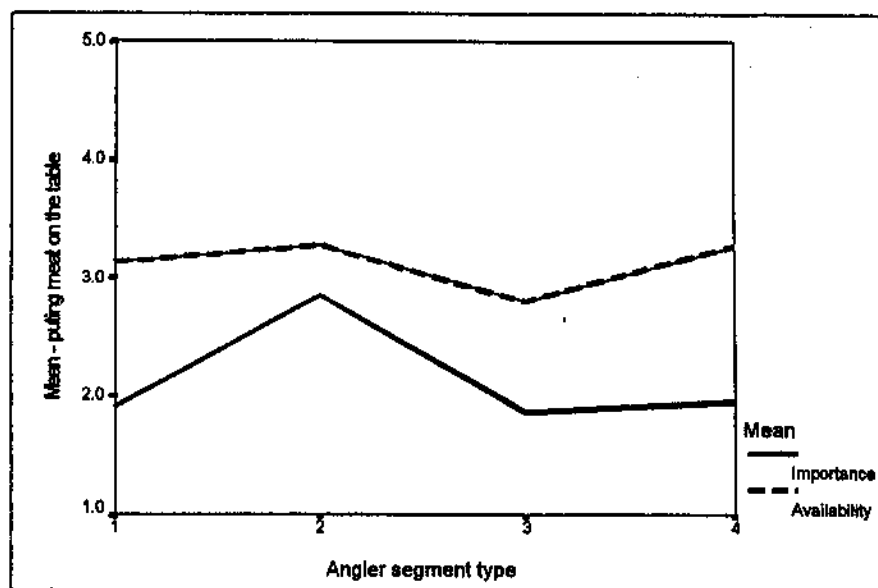


Figure 41. Importance and availability of putting meat on the table.

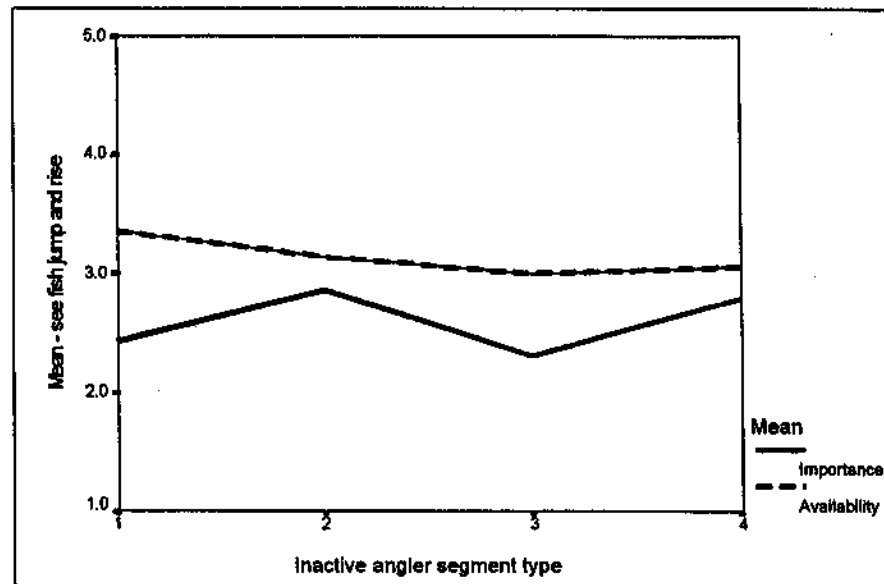
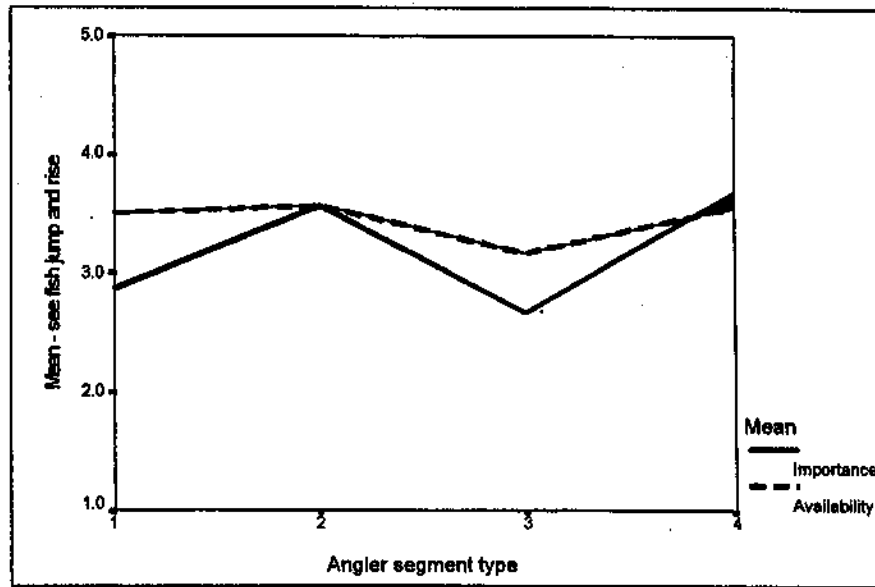


Figure 42. Importance and availability of seeing fish jump and rise.

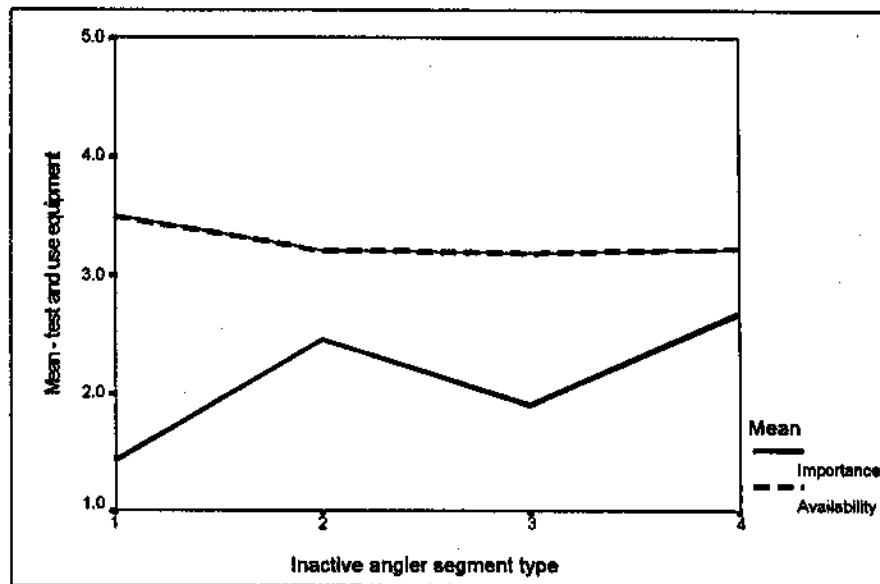
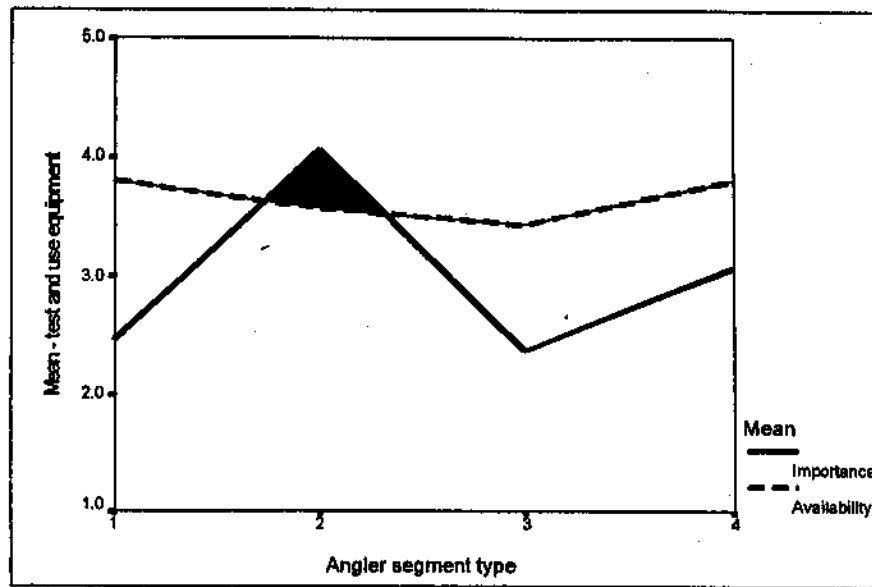


Figure 43. Importance and availability of testing and using equipment.

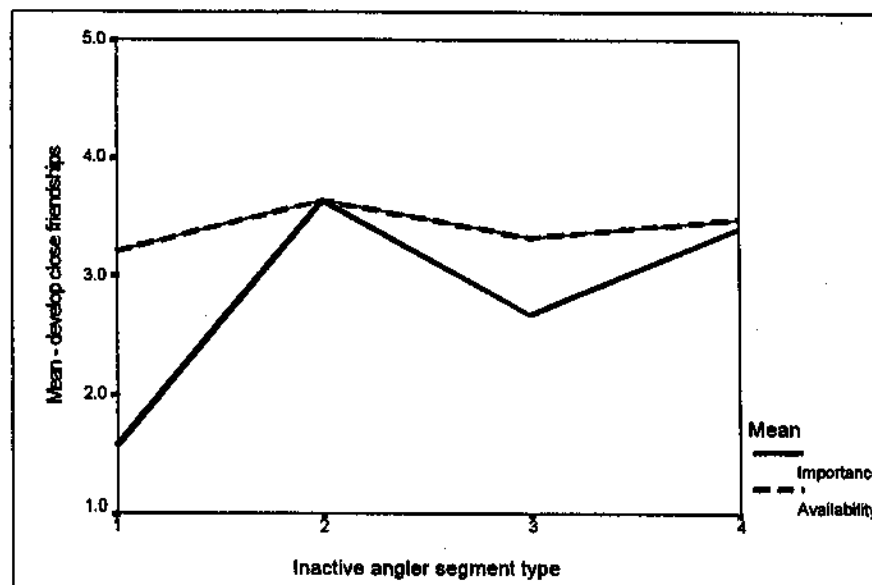
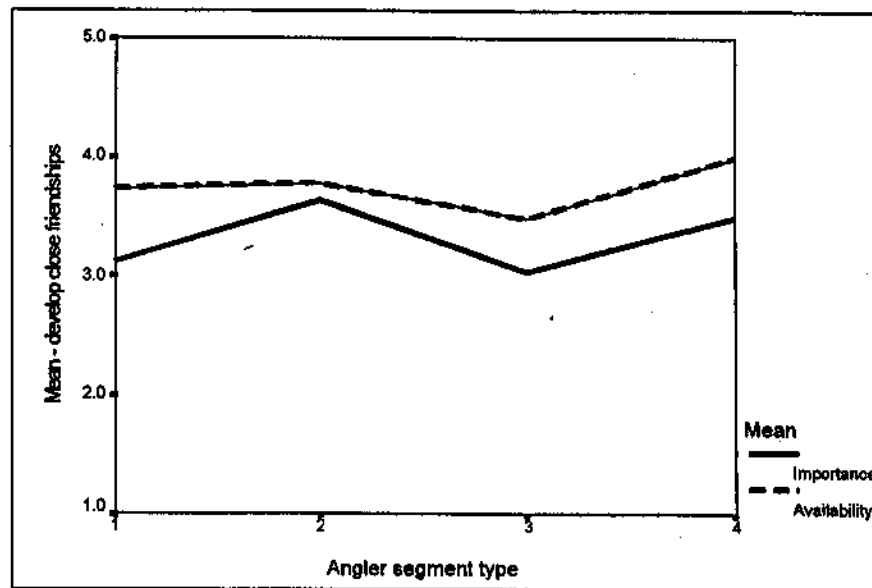


Figure 44. Importance and availability of developing close friendships.

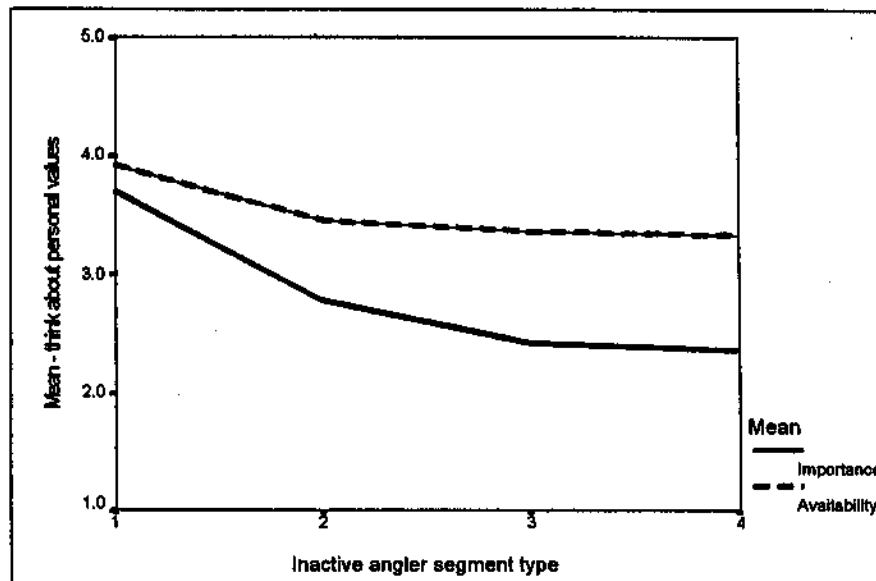
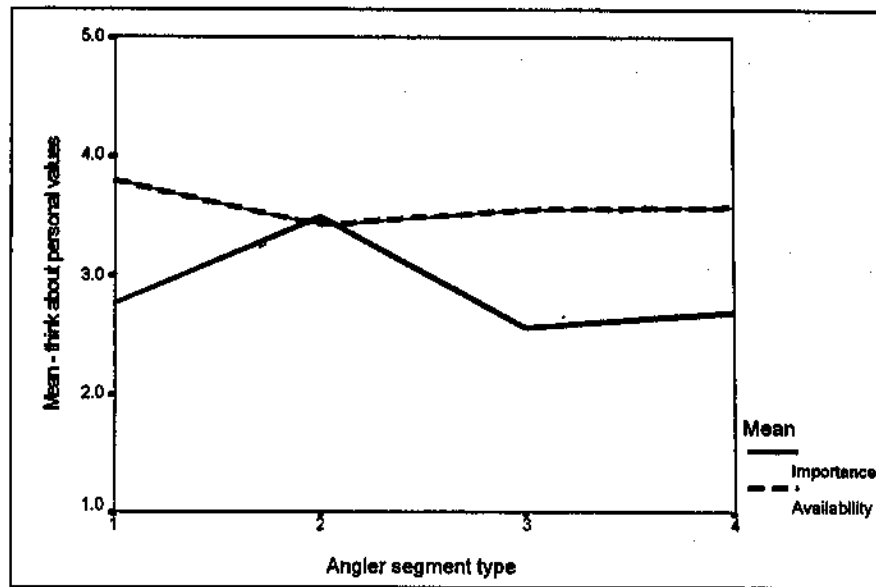


Figure 45. Importance and availability of thinking about personal values.

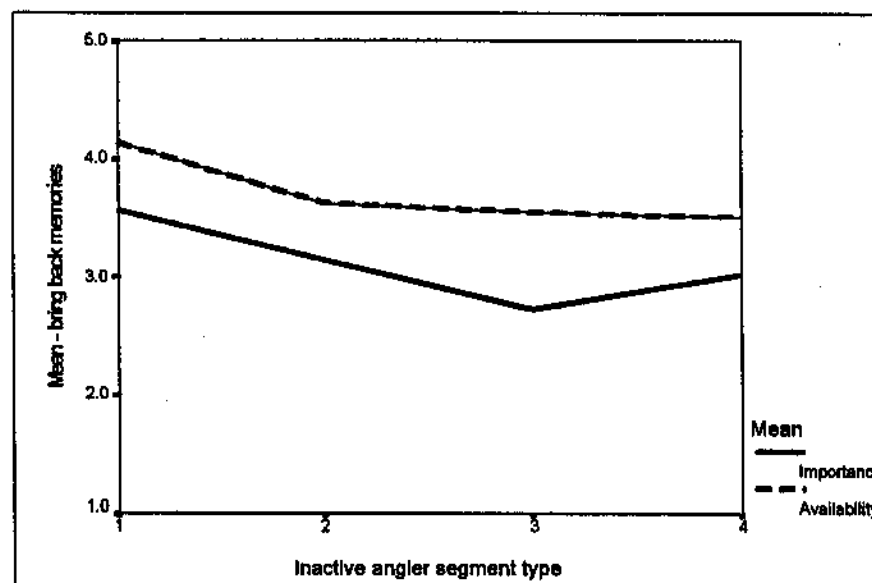
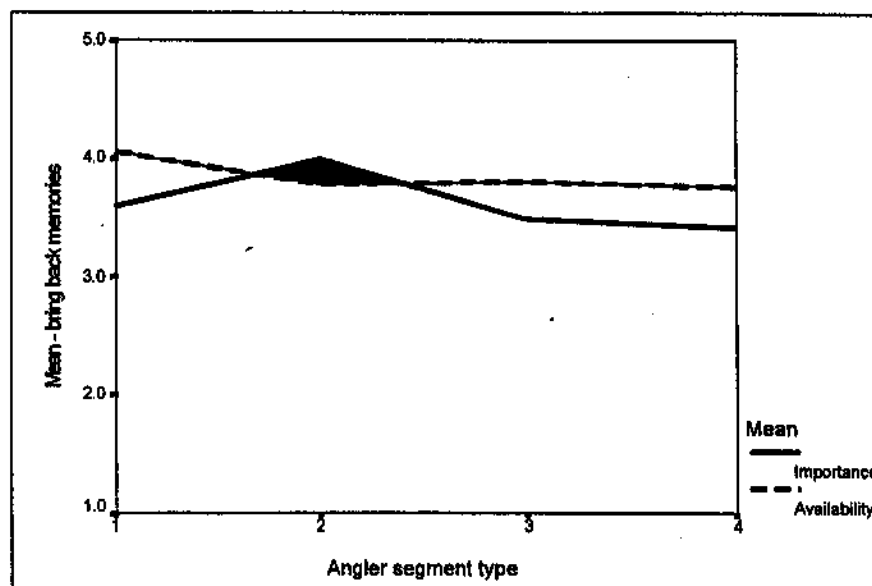


Figure 46. Importance and availability of bringing back pleasant memories.

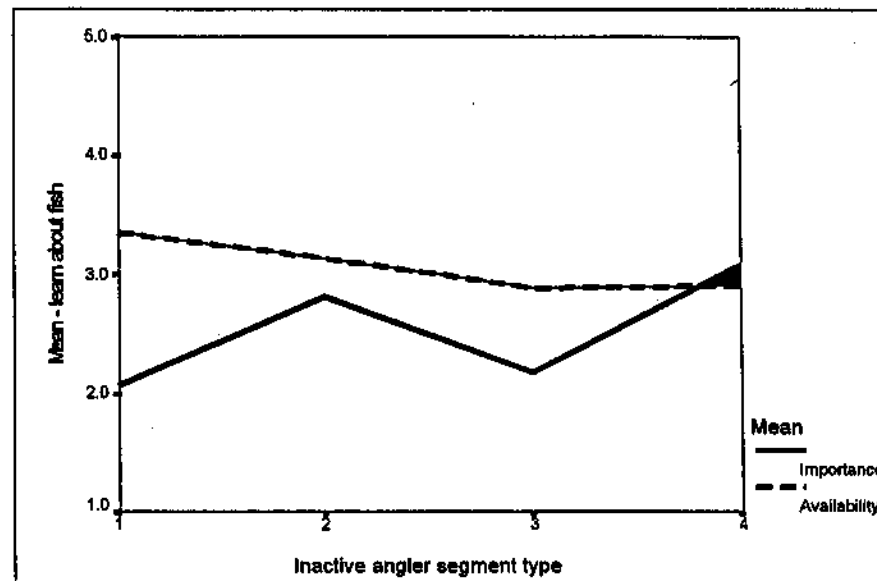
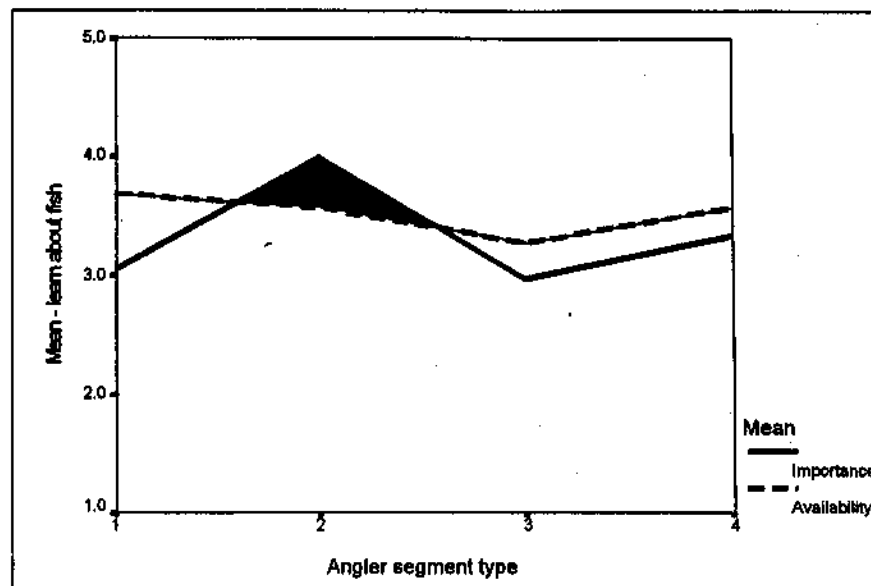


Figure 47. Importance and availability of learning about fish.

CHAPTER 8: CONSUMPTIVENESS

Historically fishing was part of a subsistence economy and fish were caught to eat; methods-of-take, motivations and benefits other than food were largely irrelevant. As angling emerged as a non-subsistence activity, first of the leisure class, and later of whole populations, the consideration of the many elements that make up sport fishing prompted managers, researchers, outdoor writers and even anglers themselves to place participants into groups based on how they fish, where they fish, and so forth (See Potter et al. 1973, Aas 1991, and Sanyal and McLaughlin 1992a for coverage of these papers).

Despite advances in our ability to segment anglers using various experience preference/motivation inventories, the conceptualization of anglers as a homogenous population in terms of their consumptive orientation persists. While it is tempting to isolate and focus on a single dimension, it is the unique packages made up of differing combinations of each dimension that best describes what motivates individual anglers, and what allows us to identify groups of anglers who seek similar needs (see Chapter 6). Our review of the angler segmentation literature (Sanyal and McLaughlin 1992a) highlights the universal value of the need for *escape* (relaxation and change) and for *nature* (natural and wild settings) in motivating anglers. Not only have most studies included measures of these two dimensions, but most studies have also found these two to be the most important motivational factors. This suggests that focusing on the other less important and more variable components of the experience may allow greater distinction between types of anglers, and allow more discriminating measures of angler satisfaction.

While there is rather good agreement on the existence and nature of the multiple satisfactions of angling, the literature fails to successfully resolve the question of importance of catch relative to satisfaction. Even within the multi-satisfaction camp there are two major schools of thought about the role and

importance of consumption. The first holds that catch is an unimportant part of the experience, and points to the evidence that shows the non-consumptive dimensions consistently being rated more important by anglers.

A second view is that it is the size and number of fish that are important. Stevens (1966) operationalized fishing quality as catch success. Brown (1968), Weithman (1978) and Weithman and Anderson (1978) extended this notion to include the number of fish caught, fighting ability, eating quality, and species. Buchanan (1983) found that catching fish was the dominant satisfaction sought by Wyoming anglers, but the multiple satisfactions associated with fishing were affected by the other, secondary activities, engaged in while fishing. Braaten (1970) reported that Washington anglers preferred fewer large fish over many small ones. In Idaho a majority of anglers indicated a preference for catching fewer, but larger trout (Gordon et al. 1969), while Duttweiler (1976) found that lake anglers preferred several medium sized fish to one large or many small ones. Finally, Graefe and Fedler (1986) cite evidence from Colorado, Michigan and Virginia where angling participation rates dropped significantly after catch-and-release and size restriction policies were implemented.

Two dichotomies have been proposed to foster a better understanding of the contributions of the often conflicting attributes of angling and hunting experiences - consumption and non-consumption and their relation to satisfaction. Weithman and Katti (1979) proposed a distinction between "fishing" (catch) and "the fishing trip," for angling that allowed satisfaction to be measured with greater accuracy. They found that fishing trips were rated differently from fishing. Hammit et al. (1989) offer the concepts of "the hunt" (harvest) and "the hunting experience". While a quality hunt may be most influenced by deer related variables such as population size and structure, these same variables have little influence on the satisfaction with the overall quality of the hunting experience.

A recent, and most promising approach is proposed by Fedler and Ditton (1986) that measures the consumptive orientation of anglers. They have shown that unique differences in consumptive orientation exist among Texas saltwater boat anglers. Low consumptive anglers were found to prefer a more diverse set of outcomes and rated the other (non-catch related) aspects of fishing higher than did highly consumptive anglers. Low consumption orientation was also seen to be related to higher satisfaction and more frequent participation. They point that the greater variance in satisfaction typically reported for consumptive motives may provide a greater and more robust opportunity to explain satisfaction than the universally high satisfaction reported for non-catch variables. By measuring the specific affinity for catch across different segments of anglers they were able to show how satisfaction differed and was explainable. The consistent distinction of a population into high, medium and low consumption groups provided a useful means of analyzing an angler population on the basis of a managerially relevant concept. For example, the higher fish-trip satisfaction levels reported by low-consumptives can be attributed to the higher importance they place on the non-catch related motives. Escape, relaxation, natural settings are more easily attained on any given fishing trip than is catching one or many fish, or large fish. Thus, low consumptives should more consistently be satisfied with their fishing trip. It follows that this group should be less sensitive to management action such as reduced catch limits.

Fedler and Ditton (1986) conclude that consumptive orientation provides "a useful means of segmenting an angling population into managerially relevant groups" and suggest the replication of their scale to provide reliability for the instrument and to examine consumptiveness under differing management and policy regimes.

To quantify the consumptive orientation of active and inactive Idaho anglers, agreement responses to a set of three items on the importance of catching fish were combined to form a summated scale. The items (Table 14) are

patterned after those validated by Fedler and Ditton (1986), and elicited responses ranging from (1) Strongly disagree to (5) Strongly agree, with (3) being neither agree nor disagree. Summated scores range from a low of three to a high of 15 (Figure 48). Anglers with scores from 3 through 7 were classified as having a low consumptive orientation. Scores of 8 through 11 describe mid-consumptiveness, while anglers with scores of 12 through 15 were considered to have a high consumptive orientation.

These three groups were also used as the basis for testing differences in attitudes toward keeping fish, number of fish caught, and trophy/challenge aspects of angling; and angler satisfaction.

The three consumptive orientation statements (Table 14) provide different measures of the importance anglers place on catching fish. Reliability statistics indicate that the three-item scale had good consistency within and between items, and that deleting any one of the items would have reduced the scale's reliability.

Item means and the distribution of responses indicate that different groups of Idaho anglers hold divergent views on the importance of catching fish. However the mean and the distribution of responses do not differ statistically between active and inactive anglers. Idaho anglers are dominantly mid-consumptives. Over 83 percent have scores between 8 and 11. Only 7.5 percent classify as low consumptive, and 9.3 percent are highly consumptive.

The three fish-related variables (keeping fish, number of fish caught, and trophy/challenge aspects of angling) represent three a-priori dimensions of angling (Table 15). Anglers who place the least importance on catching fish (those with low consumptive orientation) also place the least importance on keeping fish, the number of fish caught and on the trophy/challenge aspects of the sport. Anglers with mid- or high-consumptive orientations placed greater importance on all nine items. The mean ratings of the items differed

Table 14. Consumptive orientation scale item composition: active and inactive anglers combined.

Scale item	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	n	Item mean	Corrected item-total correlation	Alpha if item deleted ¹
When I go fishing, I'm not satisfied unless I catch at least something	5.2	32.8	22.5	31.5	7.9	670	3.04	.63	.78
A fishing trip can be successful to me even if no fish are caught ²	4.3	16.5	16.4	43.9	18.9	672	3.56	.68	.73
When I go fishing, I'm just as happy if I don't catch a fish ²	6.2	35.8	20.4	30.0	7.6	673	2.97	.68	.73

1 Standardized Cronbach alpha = .82

2 For the calculation of alpha, item responses were reserved due to the negative wording of these items

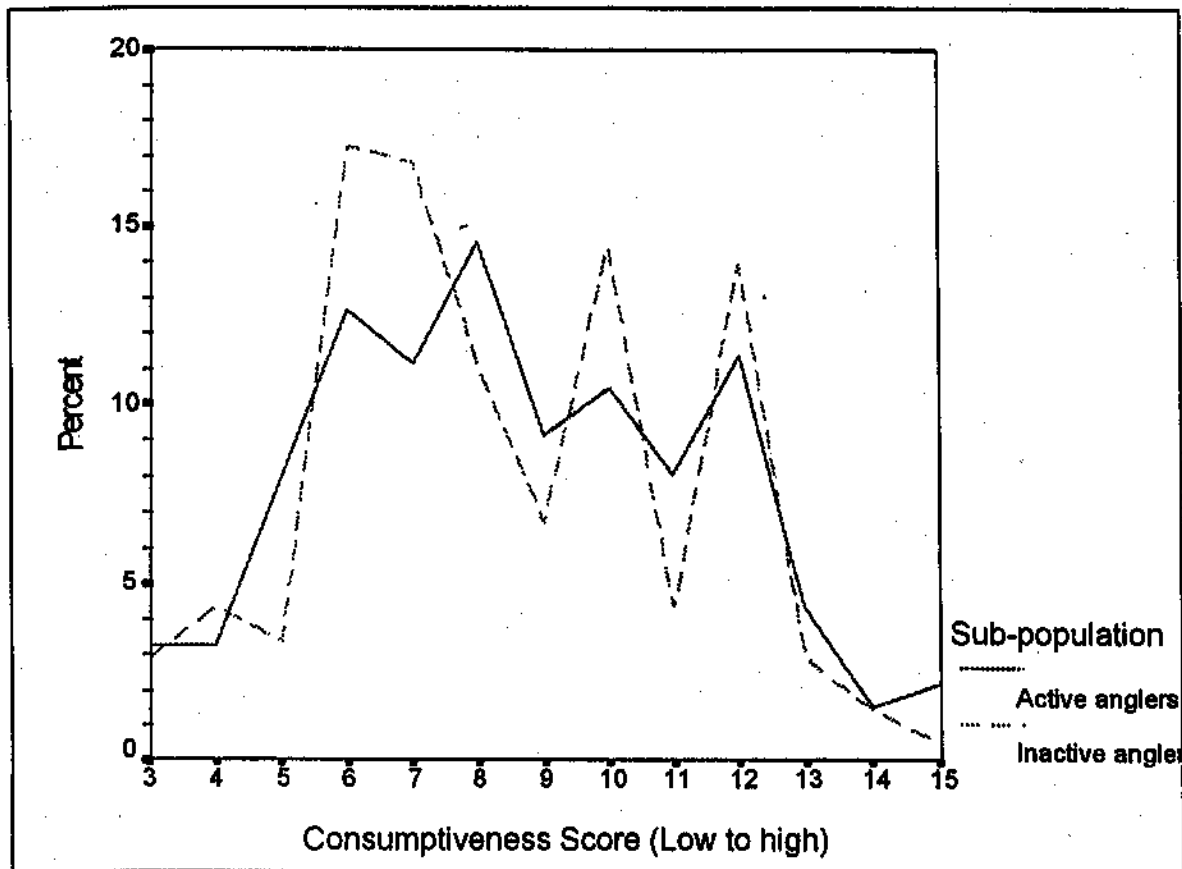


Figure 48. Distribution of consumptive orientation scores.

significantly between catch orientation, except for catching fish that are hard to catch and land. It is important to note that this item had the highest (most important) rating of all nine items. Differences between the mid- and the high-consumptive groups are less pronounced than between the low-orientation anglers and the other two.

Table 15. Mean importance ratings for three a-priori dimensions of angling by consumptive orientation

Angling dimension ¹	Active anglers			Inactive anglers		
	Consumptive orientation ²					
	Low	Mid	High	Low	Mid	High
<i>Keeping fish</i>						
I'm just as happy if I don't keep the fish I catch	2.3a	2.5b	3.0c	2.3a	2.8bc	3.0c
Keeping the fish I catch is more enjoyable than releasing them	3.4a	3.2ac	3.0c	3.0a	2.8a	2.7a
Bringing home fish to the table is an important outcome of fishing	3.6a	3.2b	2.7c	3.6a	3.2bc	2.9c
<i>Number of fish caught</i>						
A full stringer is the best indicator of a good fishing trip	3.8a	3.3b	2.8c	3.7a	3.1b	2.7c
The more fish I catch the happier I am	3.3a	2.7b	2.4c	3.4a	2.9b	2.5c
A successful fishing trip is one in which many fish are caught	3.2a	2.7b	2.4c	3.1a	2.5bc	2.3c
<i>Trophy/Challenge</i>						
The bigger the fish I catch, the better the fishing trip	3.2a	2.5b	2.3c	3.4a	2.8b	2.3c
Catching trophy fish is the biggest reward to me	3.1a	2.9ac	2.8c	3.5a	3.2ac	3.0c
I'm happiest with a fishing trip if I catch fish that are hard to catch and land	2.3	2.1	2.2	2.5	2.3	2.2

1 Response format ranges from (1) Strongly Agree to (5) Strongly Disagree

2 Means with different superscripts differ significantly from each other, $p \leq .05$, Mann-Whitney U-Test.

Catch orientation is related to satisfaction level of anglers (Figure 49). Mean satisfaction ratings increased significantly (Mann-Whitney U-Test) as catch orientation increased. Low-consumptive anglers had a mean satisfaction rating of 19.7, compared to 18.4 and 17.1 for mid-and high-consumptive oriented

anglers respectively. The differences in distribution of satisfaction scores differed significantly between orientations, except high-and mid-consumptives.

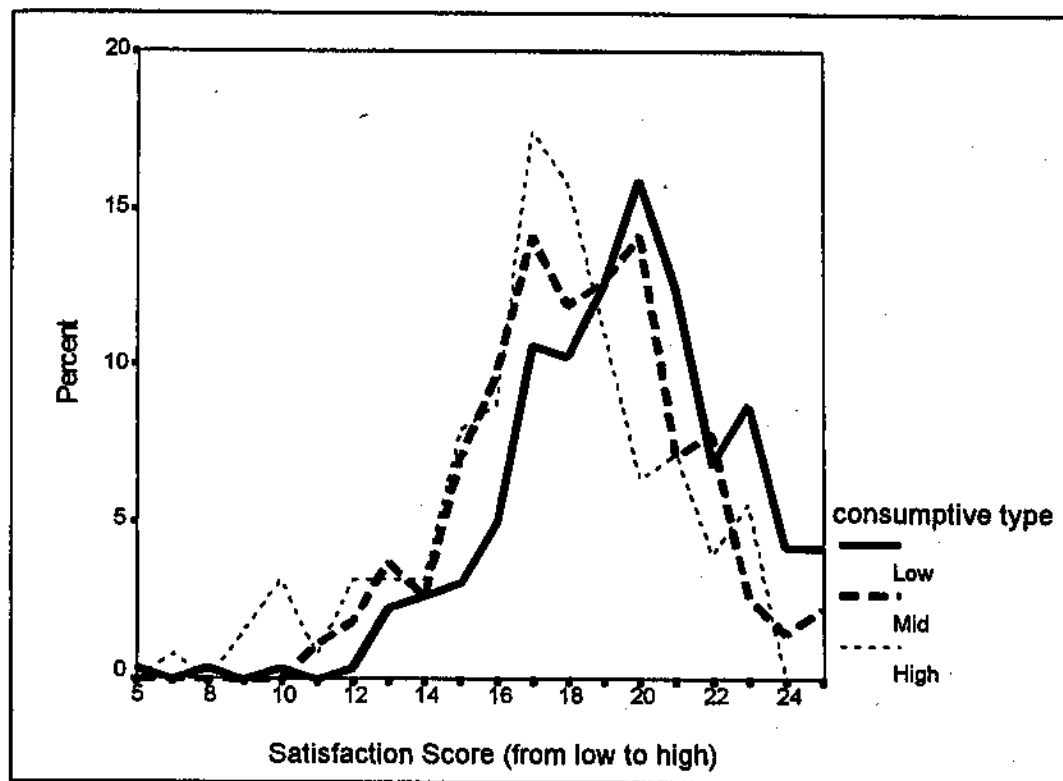


Figure 49. Satisfaction levels for low-, mid- and high-consumptive oriented anglers.

What is most significant here is that although keeping fish (or the opportunity or potential to keep fish) is of some importance to a majority of anglers, consumptiveness is associated with lower satisfaction levels. Also, all anglers, regardless of orientation, rate the need to fish for hard to catch-and-land fish higher than all the other aspects of consumptiveness. What is not clear is the role of the other factors - human and biological - in prompting the differences in consumptiveness. In the next chapter we examine the roles of 31 factors believed to be important in activity persistence.

CHAPTER 9: ACTIVITY PERSISTENCE

A diversity of opinion exists regarding the concept of persistence and how it should be measured. The approach used in this study examined persistence from the perspective of identifying the role of potential deterrents to fishing, either as reasons for never being induced to try the sport, or as reasons for giving up fishing. The items were worded so as to also be presented as inducements (reasons why active anglers continue to fish). Respondents were instructed to rate the importance of each of the items on a 5-point Likert type scale ranging from *Not Important* to *Extremely Important* (Table 16).

It is critical to interpret this scale in the context that it was administered: The Higher percentage of active anglers selecting an item, the more important it was in motivating their continued participation in fishing. The higher percentage of inactive and non anglers selecting an item, the more important that item was in terminating or inhibiting their participation in fishing.

Table 16. Importance and rank ordering of items related to active persistence and termination.

ITEM ¹	ACTIVE ANGLERS		INACTIVE ANGLERS		NON ANGLERS	
	Percent responding "quite" or "extremely Important"	Rank	Percent responding "quite" or "extremely Important"	Rank	Percent responding "quite" or "extremely Important"	Rank
The quality of water.	86.5	1	35.5	2	44.1	1
Having the time to fish.	83.6	2	46.0	1	29.7	4
Knowing where to fish.	79.2	3	19.1	11	26.8	5
Having a variety of waters in which to have fished.	75.9	4	18.6	12	19.7	17

¹ Although these items are written in a negative form, i.e., as reasons for no longer fishing or for never fishing, they were presented to active anglers as positive reasons for activity persistence. See Appendix A, Q-12 (pages A-6-7).

ITEM ¹	ACTIVE ANGLERS		INACTIVE ANGLERS		NON ANGLERS	
	Percent responding "quite" or "extremely Important"	Rank	Percent responding "quite" or "extremely Important"	Rank	Percent responding "quite" or "extremely Important"	Rank
Having the interest to fish.	72.6	5	13.5	18	35.4	3
Having lakes to fish in.	70.8	6	15.9	14	20.6	16
Being physically able to fish.	70.3	7	16.4	13	15.6	25
Having an area close to home that I could fish.	66.7	8	23.7	6	21.9	12
Having to be around water.	66.1	9	5.9	31	3.3	36
Having family or friends to fish with.	59.2	10	24.2	5	38.9	2
Having wild trout streams to fish.	56.6	11	25.6	4	26.2	7
Knowing how to use fishing equipment.	55.2	12	9.6	26	7.0	35
Knowing how to clean fish.	52.6	13	6.4	30	11.8	27
Having to handle fish.	51.6	14	4.6	32	8.4	32
Knowing how to use a boat.	51.0	15	7.0	29	11.4	29
Having the equipment to fish with.	49.5	16	15.7	15	26.1	8
Having the money to fish.	47.3	17	21.3	9	26.0	9
Having to handle bait.	44.0	18	4.6	33	9.9	31
The large number of other anglers I ran into while I was out fishing.	41.1	19	30.6	3	21.8	13
Being able to use motor boats.	40.9	20	3.5	35	7.4	34
Having the right fishing skills	40.3	21	11.4	21	23.7	10
Having to release my fish.	36.2	22	11.2	22	18.9	19
Having designated Wilderness areas to fish in.	34.3	23	14.0	17	15.7	24

ITEM ¹	ACTIVE ANGLERS		INACTIVE ANGLERS		NON ANGLERS	
	Percent responding "quite" or "extremely Important"	Rank	Percent responding "quite" or "extremely Important"	Rank	Percent responding "quite" or "extremely Important"	Rank
Having to fish in waters on which motors were allowed.	33.0	24	11.0	24	18.8	20
Having roadless areas to fish in.	27.4	25	11.2	23	10.0	30
Fishing regulations that were too restrictive.	25.1	26	21.7	8	17.2	22
The size of fish I did catch.	23.1	27	9.9	25	17.1	23
Having put-and-take waters.	20.3	28	7.5	28	21.0	14
The difficulty of road access.	18.2	29	14.6	16	19.2	18
The number of fish I was <u>allowed</u> to harvest.	16.7	30	9.3	27	20.8	15
The number of fish I was able to catch.	12.9	31	20.1	10	23.3	11
Complicated fishing regulations.	N/A	N/A	23.7	7	26.5	6
The amount of time it took to catch a fish.	N/A	N/A	12.7	20	17.6	21
The amount of time I had to spend away from my family.	N/A	N/A	12.9	19	14.7	26
Having to clean my fish.	N/A	N/A	4.1	34	11.7	28
Feeling sorry for fish.	N/A	N/A	3.4	36	8.3	33

Although many items have the same relative rankings, it is important to note that the percent of people responding positively to each item varies greatly. For example, "the quality of the water" is rated first or second by all three groups. However, it is important (and presumably a positive factor, i.e., the

quality is high) to over 86 percent of active anglers, and important (and presumed negative, i.e. the quality of the water is poor) to about only 40 percent of each of the other two groups. A first conclusion that can be reached is that all three groups are influenced by many factors and that activity persistence is a complex construct. A second conclusion is that among active anglers knowledge about the availability of the resource (knowing where to fish, presence of specific waters, etc.) seems to prompt persistence. These are followed by angling skills, conducive regulations and management practices, and finally by squeamishness and actual experience.

Inactive anglers, on the other hand, seem to most affected by restrictive regulations and management and the availability of resources, including crowding. That is, they are effectively "turned off" by how the resource is made available to them. Non anglers lack the interest and personal resources for the sport, but they are also affected by perceptions of resource availability. Squeamishness is not a major factor for either group.

Thus it appears that what may be a good strategy to retain active anglers may not attract new anglers. In fact, increasing the number of new anglers will probably prompt some existing anglers to drop out.

A stepwise Discriminant analysis (Tables 17 to 19) was employed to determine which of these attributes are useful in differentiating between active anglers, drop-outs and non-anglers. The original set of 31 variables produced a set of 16 variables which were found to have significant (beyond .05) univariate F-ratings, suggesting discriminating variables (Table 17).

Linear Discriminant analysis produced two functions that were statistically significant. The first Eigenvalue and its canonical correlation (Table 18) denote the ability of the function to separate active anglers from the other two groups. Although the second function is weak, it has an Eigenvalue above the .10 threshold that Klecka (1980) suggests may have value as a descriptor, and

its canonical correlation (.3382) satisfies the minimum requirements of Afifi and Clark (1990) for predictor status for behavioral data. The group centroids (Table 18) suggest that the second function is important in distinguishing between inactive and non-anglers.

Table 17. Variables included in the final stepwise Discriminant analysis.

Order	Wilks' Lambda	Significance	Variable Label
1	.41069	.0000	Having to be around water.
2	.35764	.0000	Not having access to a variety of waters
3	.32104	.0000	Not having the interest to fish.
4	.30207	.0000	Not having access to put & take waters
5	.28389	.0000	Not being physically able to fish.
6	.27420	.0000	Not being able to use motor boats.
7	.26800	.0000	Not having lakes to fish in.
8	.26173	.0000	The small number of fish I was able to catch
9	.25647	.0000	Not knowing where to fish.
10	.25185	.0000	Not having designated Wilderness to fish in
11	.24784	.0000	The difficulty of road access to fishing waters
12	.24474	.0000	Having to release my fish.
13	.24182	.0000	Not having an area close to home
14	.23934	.0000	Not having the equipment to fish with
15	.23688	.0000	Not knowing how to use a boat.
16	.23441	.0000	Not having the time to fish.

Table 18. Canonical Discriminant functions of active, inactive and non-anglers on reasons for activity persistence.

Function	Eigenvalue	Canonical Correlation	Group Centroids		
			Active	Inactive	non-anglers
1	2.7781	.8575	1.8	-1.6	-1.6
2	.1291	.3382	0.0	-.7	.3

Table 19. Final classification results showing the validity of discriminating activity persistence variables as predictors of angler group membership.

Actual Group	No. of Cases	Predicted Group Membership		
		Active	Inactive	Non angler
Active	417	391 (93.8%)	4 (1.0%)	22 (5.3%)
Inactive	150	13 (8.7%)	67 (44.7%)	70 (46.7%)
Non angler	298	19 (6.4%)	40 (13.4%)	239 (80.2%)

Percent of "grouped" cases correctly classified: 80.58%

The final classification results further support the Discriminant analysis. Over 90 percent of active anglers were correctly identified using the 16 variables as predictors, while almost half of the inactive anglers were classified as non-anglers, as was suggested by the first Discriminant function. However, overall over 80 percent of the cases were correctly classified. Such a high level of classification accuracy suggests that the variables identified in Table 17 be investigated further for other insights to activity persistence. One such relationship that warrants examination is the relationship between these variables that affect activity persistence and consumptive orientation.

Table 20 shows the mean scores of 12 variables that differ significantly across catch orientation. Several key differences are immediately apparent. First the expected differences in the catch related variables: (size, number caught, number allowed, having to release fish and time needed to catch fish) are more important as consumptiveness increases. Second crowding is a more important factor for low consumptive oriented anglers than the others. As consumptive orientation increases so does the need for areas close to home, knowledge of where to fish and easy road access, but the reliance on motors and need for roadless areas diminishes.

Table 20 is ordered by the importance placed on each variable by mid consumptive anglers who make up about 80 percent of Idaho's resident anglers. Thus the salient role of knowledge and perceived crowding to this group is now is now apparent.

Table 20. Mean scores for variables affecting activity persistence by consumptive orientation (significant comparisons only).

Variable affecting activity persistence	Consumptive Orientation		
	LOW	MID	HIGH
Knowing where to fish.	3.3a ¹	3.7 ²	3.7
The large number of other anglers I ran into while I was out fishing.	3.7 ^a	3.1	3.0
Having an area close to home that I could fish.	2.2 ^a	2.7 ^b	3.2 ^c
Having to release my fish.	2.2 ^a	2.7 ^b	3.2 ^c
The size of fish I did catch.	2.0 ^a	2.6 ^b	3.0 ^c
Being able to use motor boats.	2.7 ^a	2.5 ^b	2.1 ^c
Having roadless areas to fish in.	2.5	2.4	2.1 ^a
The number of fish I was <u>able</u> to catch.	1.8 ^a	2.3 ^b	2.8 ^c
The difficulty of road access.	2.1 ^a	2.3	2.6
The number of fish I was <u>allowed</u> to harvest.	1.9 ^a	2.2 ^b	2.7 ^c
The amount of time it took to catch a fish.	1.6 ^a	1.8 ^b	2.7 ^c
Having to clean my fish.	1.2	1.5 ^a	1.1

1 Mann-Whitney U-test, $p \leq .05$. Means with different superscripts differ significantly.

2 "1" = Not important, "2" = Somewhat important, "3" = moderately important, "4" = Quite important, "5" = Extremely important.

REFERENCES

- Aas, Ø. 1992. Ferskvannsfiskeforvaltning og fritidsfiske - En samfunnsfaglig kunnskapsoversikt (*Social science in freshwater fisheries management - A literature review*). NINA Utredning 27:1-44. Norwegian Institute for Nature Research, Lillehammer, Norway.
- Afifi, A. A. & V. Clark. 1990. Computer-aided multivariate analysis. (Second ed.). New York: Van Nostrand Reinhold.
- Bass, B. M., W. F. Cascio, and E. J. O'Connor. 1974. Magnitude estimations of expressions of frequency and amount. *Journal of applied psychology* 59(3):310-320.
- Braaten, D. O. 1970. Characteristics and angling desires of western Washington trout anglers, and a simulation of the fishery-management system so as to optimize angler enjoyment. Ph.D. Dissertation, Univ. of Washington, Seattle.
- Brown, R. E. 1968. A survey of participation, motivation, criteria for satisfaction, and characteristics of trophy trout anglers. M.S. Thesis, Univ. of Michigan. 276pp.
- Cronbach, L. J. 1951. Coefficient alpha and the internal structure of tests. *Psychometrika* 16:297-334.
- Dillman, D. A. 1978. Mail and telephone surveys: The total design method. NY.
- Driver, B. L. 1977. Item pool scales designed to quantify the psychological outcomes desired and expected from recreation participation. USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO.
- Duttweiler, M. W. 1976. Use of questionnaire surveys in forming fishery management policies. *Trans. Am. Fisheries Soc.* 105:232-239.
- Fedler, A. J. and R. B. Ditton. 1986. A framework for understanding the consumptive orientation of recreational fishermen. *Environmental Mgmt.* 10(2):221-227.
- Gordon, C. D., D. W. Chapman, and T. C. Bjorn. 1969. The preferences, opinions and behavior of Idaho anglers as related to quality in salmonid fisheries. *Proceedings Annual Conference Western Assn. of State Game and Fish Commissions.* 49:98-114.
- Graefe, A. R. and A. J. Fedler. 1986. Situational and subjective determinants of satisfactions in marine recreational fishing. *Leisure Sciences* 8(3):275-294.

- Hammit, W. E., C. D. McDonald, and F. P. Noe. 1989. Wildlife management: managing the hunt versus the hunting experience. *Envior. Management* 13(4):503-507.
- Idaho Department of Commerce. 1992. Idaho Facts. Boise, ID.
- Klecka, W.R. 1980. Discriminant analysis. Sage Publications. Beverly Hills, CA.
- McLaughlin, W. J., N. Sanyal, J. Tangen-Foster, J. F. Tynon, S. Allen, and C. C. Harris. 1989. 1987-88 Idaho rifle elk hunting study. Volume 1: Results. Contribution No. 499, Idaho Forest, Wildlife and Range Experiment Station, Moscow.
- Potter, D. R., K. M. Sharpe, and J. C. Hendee. 1973. Human behavior aspects of fish and wildlife conservation: an annotated bibliography. USDA - F. S. Gen. Tech Report PNW - 4. Portland, OR.
- Sanyal, N., W. J. McLaughlin, J. Tangen-Foster, J. F. Tynon, S. Allen, and C. C. Harris. 1989. 1987-88 Idaho rifle deer hunting study. Volume 1: Results. Contribution No. 500, Idaho Forest, Wildlife and Range Experiment Station, Moscow.
- Sanyal, N and McLaughlin, W. J. 1990. Identifying different types of Idaho anglers: A pilot analysis using 1988 Idaho Angler Opinion Survey Data. Prepared For Idaho Department of Fish and Game. Univ, of Idaho, Moscow,
- Sanyal, N. and McLaughlin, W. J. 1992a. The relationship between angler motivation and satisfaction, with special emphasis of the role of market segmentation to enhance measurement and management of angler satisfaction. Prepared for Idaho Fish and Game.
- Sanyal, N. and McLaughlin, W. J. 1992b. The literature on angler segmentation. Prepared for Idaho Fish and Game.
- Sanyal, N. and McLaughlin, W. J. 1992c. Synopsis of the empirical and theoretical literature on activity persistence, with emphasis on developing survey instruments and methodology for use with sport anglers in Idaho. Prepared for Idaho Department of Fish and Game.
- Stevens, J. B. 1966. Angler success as a quality determinant of sport fishery recreational value. *Trans. N. Am. Fisheries. Soc.* 95(4):357-362.
- Weithman, A. S. 1978. A method of evaluating fishing quality: development, testing, and application. Ph.D. Dissertation. Univ. of Missouri. 129pp.
- Weithman, A. S., and Katti, S. K. 1979. Testing of fishing quality indices. *Trans. Am. Fisheries. Soc.* 108:320-325.
- Weithman, A. S., and R. D. Anderson. 1978. A method of evaluating fishing quality. *Fisheries* 3(3):6-10.

Wolfe, J. H. 1970. Pattern clustering by multivariate mixture analysis.
Multivariate Behavioral Research 5:329-350.

Acknowledgments

Many people contributed to the successful completion of this project. Their help and advice helped ensure that the data we collected and the interpretations we made aided the management of Idaho's anglers.

Connie Spofford and Steve Timpon of the State Tax Commission provided the database from which we drew our samples.

Julie Scanlin, Michelle Buclair, Al Van Vooren and Virgil Moore of Idaho Fish and Game reviewed the first draft of the report and made innumerable suggestions for improvement.

Tom McArthur of Idaho Fish and Game provided constant feed back and advice and helped us understand the managerial context of endeavor.

Mark Walker of the Department of Resource Recreation and Tourism managed survey administration and data entry. Randy Pitstick and Ed Krumpe reviewed drafts of the survey instrument.

Bjørn Kaltenborn and Øystein Aas of the Norwegian Institute for Nature Research (Lillehammer) reviewed drafts of the survey instrument and made many suggestions that improved our analysis.

This study was supported entirely by Federal Aid in Fish Restoration funds.

APPENDICES

Appendix 1: Summary Distributions Of Active Angler Survey	A-1
Appendix 2: Summary Distributions Of Inactive Angler Survey.....	A-11
Appendix 3: Summary Distributions Of Non Angler Survey.....	A-23
Appendix 4: Open Comments.....	A-28
Appendix 5: Non Response Bias Measurement Instruments.....	A-57

This first set of questions asks about your general fishing experiences.

Q-1. What kind of fishing do you engage in? *(Please check as many as apply)*

34.8% ICE FISHING	79.5% FISHING FROM A BOAT OR RAFT
54.2% FLY FISHING	85.5% SHORE FISHING
87.3% BAIT FISHING	22.0% FLOAT TUBE

Q-2. Who do you usually fish with? *(Please check as many as apply)*

51.1% ALONE	28.0% BROTHERS AND/OR SISTERS
78.4% FRIENDS	51.3% SPOUSE
56.3% CHILDREN	21.6% OTHER RELATIVES (UNCLES, AUNTS, ETC.)
27.8% PARENTS	

Q-3. When did you first start fishing? *(Please write in the year)*

I STARTED FISHING IN: MEDIAN YEAR = 1960

Q-4. How were you first introduced to fishing? *(Please write in your answer)*

I WAS FIRST INTRODUCED TO FISHING BY:

(e.g., spouse, parent, free fishing day, boy scouts, etc.) Nominal list

Q-5. Besides fishing, what other outdoor recreation activities (e.g., camping, rock hounding, skiing, etc.) do you participate in, and about how many days each year do you participate in each? *(Please write in the name of the activities and how often you participate in each)*

TOP 6 ACTIVITIES (% of responses)						
ACTIVITY (% participation)		DAYS PER YEAR				
		1-3 DAYS	4-10 DAYS	11-20 DAYS	21-30 DAYS	21+ DAYS
1.	CAMPING (26.1%)	7.9%	29.7	25.9	14.7	21.7
2.	HUNTING (29.3)	7.6	29.9	24.8	15.7	22.0
3.	SNOWSKIING (10.8)	10.7	30.3	25.3	17.0	16.6
4.	HIKING/BACKPACKING (7.4)	9.8	27.1	27.6	15.1	20.4
5.	TRAIL MACHINES/MTN BIKES/OHV'S (3.6)	9.3	24.9	21.5	18.0	26.3
6.	RAFTING/BOATING (5.3)	9.8	28.4	28.4	16.8	16.5
7.	ALL OTHER ACTIVITIES (17.4%)	6.8	24.6	23.2	17.8	27.6

Q-6. Roughly how many days do you spend fishing each year? (Please check one)

4.1%	1 - 3 DAYS A YEAR
18.0%	4 - 10 DAYS A YEAR
28.9%	11 - 20 DAYS A YEAR
17.1%	21 - 30 DAYS A YEAR
31.9%	31 OR MORE DAYS A YEAR

Next, some questions about why you fish

Q-7. Below is a list of possible reasons for fishing in Idaho. Please tell us how important each one is to you as a reason to fish in Idaho.

<u>REASONS FOR FISHING</u>	How important is each reason to you? (Please circle one response for each reason)					MEAN
	NOT IMPORTANT	SOMEWHAT IMPORTANT	MODERATELY IMPORTANT	QUITE IMPORTANT	EXTREMELY IMPORTANT	
1. Developing my fishing skills.	25.8%	28.0	27.1	14.3	4.8	2.4
2. Releasing or reducing some built-up tensions while I fish.	16.2	18.8	24.9	25.3	14.7	3.3
3. Feeling close to nature while I fish.	5.4	11.5	16.9	37.5	28.6	3.7
4. Showing others I can fish.	76.3	13.9	5.4	33.3	1.1	1.4
5. For the stimulation and excitement of fishing	3.9	11.6	24.8	35.8	23.9	3.6
6. Catching trophy fish.	33.4	21.3	26.2	11.7	7.4	2.4
7. Developing personal spiritual values.	35.4	19.6	21.1	15.0	8.9	2.4
8. Competing against other anglers.	76.3	12.4	6.7	3.5	1.1	1.4
9. Getting away from the usual demands of life.	2.2	3.7	16.5	38.0	39.7	4.1
10. Catching <i>any</i> fish.	19.3	25.3	27.0	19.3	9.0	2.7
11. Being in natural settings while I fish.	3.4	6.7	16.6	39.0	34.3	3.9
12. Experiencing tranquillity while I fish.	4.3	10.2	19.3	35.9	30.3	3.8
13. Testing my fishing abilities.	21.6	26.6	30.5	15.4	5.8	2.6
14. Being on my own	55.8	1.1	7.4	11.4	24.3	2.3
15. Filling my daily catch limits.	63.9	16.7	12.1	3.5	3.9	1.7

<u>REASONS FOR FISHING</u>	How important is each reason to you? (Please circle one response for each reason)					MEAN
	NOT IMPORTANT	SOMEWHAT IMPORTANT	MODERATELY IMPORTANT	QUITE IMPORTANT	EXTREMELY IMPORTANT	
16. Sharing what I know about fishing with others.	18.2	28.4	33.6	14.8	5.0	2.6
17. Being with friends while I fish.	9.3	18.2	26.4	32.9	13.2	3.2
18. Catching different kinds of fish.	23.4	27.1	31.2	13.4	4.8	2.5
19. Learning more about the river, lake or stream.	8.9	16.5	31.9	30.6	12.1	3.2
20. Being with my family while I fish.	7.4	14.0	27.5	29.3	21.8	3.4
21. Putting meat on the table.	50.5	23.4	15.0	7.2	3.9	1.9
22. Seeing fish jump or rise.	15.8	24.9	28.6	22.1	8.7	2.8
23. Testing and using my fishing equipment.	25.9	27.4	26.3	14.9	5.4	2.5
24. Developing close friendships with my fishing companions.	11.9	20.0	27.2	29.7	11.2	3.1
25. Thinking about my personal values while I fish.	22.0	25.5	24.8	18.1	9.5	2.7
26. Bringing back pleasant memories	4.1	15.1	24.0	36.7	20.1	3.5
27. Learning more about fish.	11.4	20.7	31.7	25.5	10.6	3.0

Q-8. How do you feel about fishing? For each statement below please tell us how strongly you agree or disagree.

<u>STATEMENT</u>	How do you feel about each statement? (Please circle one response for each statement)					MEAN
	STRONGLY AGREE	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	STRONGLY DISAGREE	
1. I thoroughly enjoy fishing.	58.4	33.0	7.8	0.0	0.9	1.5
2. Fishing is not as enjoyable as I thought it would be.	0.2	2.8	9.7	49.6	37.7	4.2
3. I cannot imagine better recreation than fishing.	9.9	23.2	41.1	21.1	4.7	2.9
4. I am disappointed with some aspects of fishing.	7.1	41.6	20.3	26.1	5.0	2.8
5. Fishing is worth the time and money spent to participate.	26.9	57.6	11.8	2.8	0.9	1.9

Q-9. Below is a list of possible experiences one can get through fishing. Please tell us how available you find the opportunities for experiencing each in Idaho.

<u>REASONS FOR FISHING</u>	<div> How available do you find opportunities for experiencing each? <i>(Please circle one response for each reason)</i> </div>					MEAN
	NOT AVAILABLE	SOMEWHAT AVAILABLE	MODERATELY AVAILABLE	QUITE AVAILABLE	EXTREMELY AVAILABLE	
1. Developing my fishing skills.	3.9	14.8	24.2	40.2	16.8	3.5
2. Releasing or reducing some built-up tensions while I fish.	2.4	15.6	22.0	39.6	20.4	3.6
3. Feeling close to nature while I fish.	1.5	6.3	18.3	41.4	32.5	4.0
4. Showing others I can fish.	15.5	23.9	25.9	26.4	8.4	2.9
5. For the stimulation and excitement of fishing.	1.8	10.8	24.6	42.4	20.4	3.7
6. Catching trophy fish.	10.7	33.5	28.0	19.9	7.9	2.8
7. Developing personal spiritual values.	9.7	21.1	21.8	33.0	14.4	3.2
8. Competing against other anglers.	15.8	25.3	26.0	23.5	9.3	2.8
9. Getting away from the usual demands of life.	0.7	5.7	18.6	41.9	33.2	4.0
.....						
10. Catching <i>any</i> fish.	3.1	16.0	30.3	34.6	16.0	3.4
11. Being in natural settings while I fish.	0.4	7.8	18.4	42.1	31.2	4.0
12. Experiencing tranquillity while I fish.	1.3	10.9	24.6	38.7	24.6	3.7
13. Testing my fishing abilities.	3.3	13.2	22.1	41.9	19.4	3.6
14. Filling my daily catch limits.	9.5	32.6	31.7	18.1	8.1	2.8
15. Being on my own while fishing	6.1	19.3	23.0	30.9	20.8	3.4
16. Sharing what I know about fishing with others.	3.8	18.6	32.5	35.2	10.0	3.3
17. Being with friends while I fish.	1.1	10.6	21.6	47.8	18.9	3.7
18. Catching different kinds of fish.	2.6	22.1	35.8	29.0	10.5	3.2
19. Learning more about the river, lake, or stream.	3.5	11.9	25.7	44.0	14.9	3.5

How available do you find opportunities for experiencing each?

(Please circle one response for each reason)

	NOT AVAILABLE	SOMEWHAT AVAILABLE	MODERATELY AVAILABLE	QUITE AVAILABLE	EXTREMELY AVAILABLE	MEAN
20. Being with my family while I fish.	2.6	12.0	22.1	44.0	19.3	3.6
21. Putting meat on the table.	7.1	32.3	27.8	23.8	8.9	2.9
22. Seeing fish jump or rise.	3.7	18.9	31.1	33.6	12.7	3.3
23. Testing and using my fishing equipment.	2.6	11.8	26.5	42.5	16.4	3.6
24. Developing close friendships with my fishing companions.	1.3	12.1	26.2	44.8	15.6	3.6
25. Thinking about my personal values.	3.1	9.7	26.8	40.7	19.7	3.6
26. Bringing back pleasant memories.	0.7	6.1	20.8	48.6	23.9	3.9
27. Learning about fish.	3.5	14.2	30.1	39.7	12.4	3.4

Q-10. If you could not fish how would you feel? *(Please check one)*

1.1%	NOT MISS IT AT ALL
6.1%	MISS IT A LITTLE
13.5%	MISS IT SOME
29.0%	MISS IT CONSIDERABLY
50.3%	MISS IT A GREAT DEAL

Q-11. How important is catching fish for you? For each of the following statements about catching fish please tell us how strongly you agree or disagree?

STATEMENT

How do you feel about each statement

(Please circle one response for each statement)

	AGREE STRONGLY	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	DISAGREE STRONGLY	MEAN
1. A fishing trip is successful even if I catch no fish.	20.0	41.2	17.8	15.4	5.6	2.5
2. A successful fishing trip is one in which I catch many fish	11.1	30.5	25.5	29.2	3.7	2.8
3. When I go fishing, I'm just as happy if I don't catch a fish.	6.7	29.2	20.8	35.7	7.6	3.1

4.	Keeping the fish I catch is more enjoyable than releasing them.	5.6	22.8	28.0	30.4	13.2	3.2
5.	Catching a trophy fish is the biggest reward for me.	12.0	23.6	26.9	31.0	6.6	3.0
6.	A full stringer is the best indicator of a good fishing trip.	5.3	15.1	24.1	43.6	11.8	3.4
7.	When I go fishing, I'm not satisfied unless I catch at least something.	8.7	29.9	22.3	33.5	5.6	3.0
8.	Bringing fish home to the table is an important outcome of fishing.	3.3	24.9	22.8	38.2	10.8	3.3
9.	The more fish I catch the happier I am.	9.6	32.2	22.4	30.2	5.7	2.9
10.	The bigger the fish I catch, the better the trip.	11.5	36.6	23.3	23.7	4.8	2.7
11.	I'm just as happy if I don't keep the fish I catch.	17.0	40.0	19.1	19.1	4.8	2.5
12.	I am happiest with a fishing trip when I catch fish that are hard to catch and land.	22.6	47.5	20.2	8.5	1.3	2.2

Now a few questions about what keeps you an active angler

Q-12. How important has each of the following been in keeping you fishing year after year?

FACTOR	How important is each factor? (Please circle one response for each factor)					MEAN
	NOT IMPORTANT	SOMEWHAT IMPORTANT	MODERATELY IMPORTANT	QUITE IMPORTANT	EXTREMELY IMPORTANT	
1. The small number of other anglers I run into while I'm out fishing.	17.2	15.2	26.5	28.5	12.6	3.0
2. Having family or friends to fish with.	5.2	12.8	22.8	42.3	16.9	3.5
3. Being able to fish in an area with no roads.	31.2	15.8	15.5	17.7	9.7	2.6
4. The large number of fish I <u>have</u> caught.	35.2	26.6	25.3	9.8	3.1	2.2
5. The number of fish I am <u>allowed</u> to catch.	30.9	29.1	23.3	11.7	5.0	2.3
6. The ease of road access to my fishing areas.	27.3	29.3	25.2	14.1	4.1	2.4
7. The size of fish I catch.	18.0	28.5	30.4	17.4	5.7	2.6
8. Having the equipment to fish with.	7.6	17.0	25.9	36.6	12.9	3.3
9. Having the interest to fish.	1.3	8.0	18.0	45.4	27.2	3.9

FACTOR	How important is each factor? (Please circle one response for each factor)					MEAN
	NOT IMPORTANT	SOMEWHAT IMPORTANT	MODERATELY IMPORTANT	QUITE IMPORTANT	EXTREMELY IMPORTANT	
10. Having the money to fish.	9.8	18.2	24.7	34.7	12.6	3.2
11. Having the right fishing skills.	8.5	21.1	30.2	33.3	7.0	3.1
12. Being physically able to fish.	3.7	9.4	16.6	44.8	25.5	3.8
13. Having areas to fish in that have restrictive regulations.	27.5	20.7	26.6	16.8	8.3	2.6
14. The quality of water.	0.4	2.8	10.2	36.8	49.7	4.3
15. Having areas where motors are restricted.	24.3	16.5	18.3	23.5	17.4	2.9
16. Having areas where motors are allowed	20.5	19.4	27.1	23.6	9.4	2.8
17. Having lakes to fish in.	3.9	7.2	18.1	39.2	31.6	3.9
18. Fishing in put and take waters.	26.2	20.5	33.0	14.1	6.2	2.5
19. Fishing a designated Wilderness area.	26.9	13.3	25.5	20.3	14.0	2.8
20. Having a variety of waters to fish in.	1.1	5.0	18.0	45.3	30.6	4.0
21. Having an area close to home that I can fish.	4.1	7.6	21.5	39.1	27.6	3.8
22. Fishing where I can keep fish I catch.	20.6	18.4	24.7	20.4	15.8	2.9
23. Fishing a wild trout stream.	10.4	10.8	22.1	33.2	23.4	3.5
24. Knowing how to clean my fish.	16.6	14.4	16.4	29.7	22.9	3.3
25. Knowing how to use my fishing equipment.	5.5	14.6	24.7	34.7	20.5	3.5
26. Knowing how to use a boat.	15.7	11.3	22.0	26.4	24.6	3.3
27. Having the time to fish.	0.9	2.8	12.9	41.4	42.0	4.2
28. Being comfortable handling fish.	11.6	9.2	27.6	35.0	16.6	3.4
29. Being comfortable handling bait.	19.3	11.0	25.7	28.8	15.2	3.1
30. Being comfortable around water.	9.6	4.6	19.8	38.6	27.5	3.7
31. Knowing where to fish.	1.3	4.3	15.2	45.6	33.6	4.1

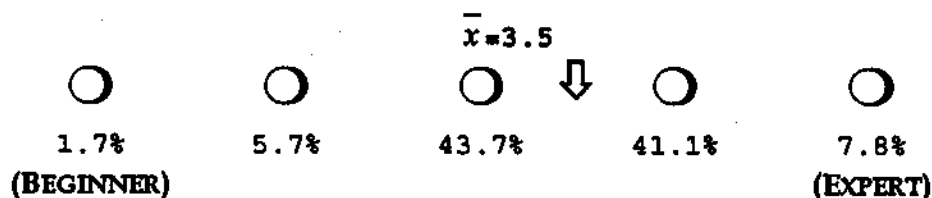
Q-13. How often do you have an enjoyable fishing trip while fishing in each of the different types of water? (Please circle one response for each type of water)

	<u>MOUNTAIN</u> <u>LAKE</u>	<u>LAKE</u>	<u>RESERVOIR</u>	<u>RIVER</u>	<u>MOUNTAIN</u> <u>STREAM</u>
NEVER	2.4%	1.8	1.6	0.4	1.1
SOME OF THE TIME	23.1	23.2	26.2	20.2	22.7
HALF OF THE TIME	6.8	15.7	14.0	12.2	7.0
MOST OF THE TIME	21.4%	33.6	34.7	34.6	23.3
ALWAYS	32.8%	21.7	16.9	31.1	39.0
I DON'T FISH THESE WATERS	13.4%	4.0	6.7	1.5	7.0

Q-14. What is your general impression of how well the Idaho Department of Fish and Game is doing its job of managing Idaho's fish resources? (Please check one)

8.1%	EXCELLENT ("A")	"GRADE POINT" = 2.6 ("B-")
42.6%	GOOD ("B")	<u>Excluding</u> 'NOT SURE'
31.9%	FAIR ("C")	
7.9%	POOR ("D")	
5.9%	VERY POOR ("F")	
3.7%	NOT SURE	

Q-15. How would you rate your expertise as an angler? (Please check the circle that best represents your skill level)



Finally some information about you

Q-16. What is your present age? (Please enter number of years)

\bar{x} 40.4 YEARS

Q-17. Are you: (Please check one)

90.7% MALE 9.3% FEMALE

Q-18. What is your present marital status? (Please check one)

76.6% MARRIED 23.4% SINGLE

Q-19. Are you a member of any fishing, conservation, environmental, or sportsmen's organizations? (Please check one)

60.4% NO

39.6% YES, I BELONG TO: (Please list the names of the organizations)

A.

B.

C.

Q-20. Do you have any children? (Please circle one)

21.4% NO \Rightarrow PLEASE SKIP TO Q-21.

78.6% YES, NUMBER OF CHILDREN \bar{x} = 2.7

A. How old are your children who live at home with you (Please enter the age of each child)

OLDEST \bar{x} = 13.1 years

5TH OLDEST \bar{x} = 9.7 years

2ND OLDEST \bar{x} = 10.3 years

6TH OLDEST \bar{x} = 8.1 years

3RD OLDEST \bar{x} = 9.4 years

7TH OLDEST \bar{x} = 6.5 years

4TH OLDEST \bar{x} = 10.8 years

8TH OLDEST \bar{x} = 3.0 years

B. How many of your children would you consider to be active anglers? (Please enter number)

PERCENT OF CHILDREN WHO ARE ACTIVE ANGLERS:

NONE = 25.1%

1 = 31.1%

2 = 27.7%

3 = 9.4%

4 = 5.1%

5 = 0.9%

6 = 0.6%

Q-21. During 1992 were you: (Please check all that apply)

80.4% EMPLOYED FULL-TIME

5.9% RETIRED

12.2% EMPLOYED PART-TIME

2.4 % HOMEMAKER

3.5 % UNEMPLOYED

3.5% STUDENT

Q-22. During 1992 how many jobs did you work at? *(Please write in your answer below)*

I WORKED AT JOBS $\bar{x} = 1.3$ jobs

We would appreciate your answering the last three questions. If, however, you feel this is a private matter we respect your decision to not answer.

Q-23. Which of the following do you consider yourself? *(Please check one)*

0.7%	AMERICAN INDIAN OR ALASKAN NATIVE
0.5%	ASIAN OR PACIFIC ISLANDER
0.0%	BLACK, NOT OF HISPANIC ORIGIN
1.8%	HISPANIC
96.4%	WHITE, NOT OF HISPANIC ORIGIN
0.7%	OTHER

Q-24. Which of the following best describes your total family income before taxes in 1992? *(Please check one)*

1.2% LESS THAN \$5,000	10.7% \$30,000 - \$34,999
2.1% \$5,000 - \$9,999	12.6% \$35,000 - \$39,999
5.2% \$10,000 - \$14,999	15.7% \$40,000 - \$49,999
9.3% \$15,000 - \$19,999	18.3% \$50,000 - \$74,999
10.2% \$20,000 - \$24,999	4.0% \$75,000 - \$100,000
8.1% \$25,000 - \$29,000	2.6% \$100,000 OR MORE

Q-25. How many people, including yourself, does this income support? *(Please enter the number of people)*

NUMBER OF PEOPLE $\bar{x} = 3.1$ people

These first questions ask about your experiences when you did fish.

Q-1. When you did fish what kind of fishing did you engage in? *(Please check as many as apply)*

14.4%	ICE FISHING
27.0	FLY FISHING
78.1	BAIT FISHING
59.1	FISHING FROM A BOAT OR RAFT
85.1	SHORE FISHING
7.9	FLOAT TUBE

Q-2. When you did fish who did you fish with? *(Please check as many as apply)*

ALONE = 32.1%	PARENTS = 27.4
FRIENDS = 62.8	SPOUSE = 58.6
CHILDREN = 51.2	OTHER RELATIVES (UNCLES, AUNTS, ETC.) = 20.5
BROTHERS AND/OR SISTERS = 25.1	

Q-3. When did you start fishing? *(Please write in the year)*

I STARTED FISHING IN: MEDIAN = 1962

Q-4. When did you last fish? *(Please write in the year)*

I LAST FISHED IN: MEDIAN = 1992

Q-5. During the last year that you fished about how many days did you fish? *(Please check one)*

21.4%	1 - 3 DAYS A YEAR
33.3	4 - 10 DAYS A YEAR
19.0	11 - 20 DAYS A YEAR
10.5	21 - 30 DAYS A YEAR
15.7	31 OR MORE DAYS A YEAR

Q-6. How were you first introduced to fishing? *(Please write in your answer)*

I WAS FIRST INTRODUCED TO FISHING BY:

(e.g., spouse, parent, free fishing day, boy scouts, etc.) Nominal list

Next, some questions about why you used to fish.

Q-7. Below is a list of possible reasons for fishing. Please tell us how important each one was to you as a reason you once fished in Idaho.

REASONS FOR FISHING	<div> How important was each reason to you? <i>(Please circle one response for each reason)</i> </div>					MEAN
	NOT IMPORTANT	SOMEWHAT IMPORTANT	MODERATELY IMPORTANT	QUITE IMPORTANT	EXTREMELY IMPORTANT	
1. Developing my fishing skills.	24.3	34.3	24.3	11.4	5.7	2.4
2. Releasing or reducing some built-up tensions while I fished.	27.8	24.9	21.5	18.5	7.3	2.5
3. Being close to nature while I fished.	4.3	9.5	16.7	34.3	35.2	3.9
4. Showing others I could fish.	73.9	12.6	9.2	1.4	2.9	1.5
5. For the stimulation and excitement of fishing.	10.9	17.1	26.1	30.3	15.6	3.2
6. Catching trophy fish.	65.2	12.4	11.0	8.1	3.3	1.7
7. Developing personal spiritual values through fishing.	53.4	13.0	17.3	12.0	4.3	2.0
8. Competing against other anglers.	79.4	10.5	7.2	1.9	1.0	1.3
9. Getting away from the usual demands of life.	1.9	6.7	23.8	34.3	33.3	3.9
10. Catching any fish.	19.3	23.2	34.8	15.0	7.7	2.7
11. Being in natural settings while I fished.	3.8	8.6	15.7	39.0	32.9	3.9
12. Experiencing tranquillity while I fished.	4.8	10.1	16.4	33.8	34.8	3.8
13. Testing my fishing abilities.	36.0	28.4	24.2	8.5	2.8	2.1
14. Filling my daily catch limits.	69.9	16.3	11.0	3.3	0.5	1.5
15. Being on my own while I fished.	47.8	20.6	16.3	10.5	4.8	2.0
16. Sharing what I knew about fishing with others.	47.4	26.1	17.1	7.1	2.4	1.9
17. Being with friends while I fished.	16.1	15.2	28.0	33.2	7.6	3.0

How important was each reason to you? (Please circle one response for each reason)						
18. Catching different kinds of fish.	54.1	20.6	20.1	3.3	1.9	1.8
19. Learning more about the river, lake, or stream.	17.1	26.7	28.1	21.4	6.7	2.7
20. Doing something with my family while fishing.	13.0	9.2	20.8	34.3	22.7	3.4
21. Putting meat on the table.	64.1	15.8	13.9	4.8	1.4	1.6
22. Seeing fish jump or rise.	23.8	29.5	27.1	12.4	7.2	2.5
23. Testing and use my fishing equipment.	38.6	28.6	20.5	10.5	1.9	2.1
24. Develop close friendships with my fishing companions.	21.4	18.1	21.9	28.1	10.5	2.9
25. Thinking about my personal values while I fished.	26.7	24.8	21.9	19.5	7.1	2.6
26. To bring back pleasant memories.	17.0	20.3	25.9	25.5	11.3	2.9
27. To learn more about fish.	27.1	25.7	28.1	13.8	5.2	2.4

Q-8. How did you feel about fishing? For each statement tell us how strongly you agree or disagree.

<u>STATEMENT</u>	How do you feel about each statement? (Please circle one response for each statement)					MEAN
	STRONGLY AGREE	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	STRONGLY DISAGREE	
1. I thoroughly enjoyed fishing.	42.2	43.6	12.8	0.9	0.5	1.7
2. Fishing was not as enjoyable as I thought it would be.	1.4	8.5	19.3	49.5	21.2	3.8
3. I could not imagine better recreation than fishing.	13.7	24.1	31.6	6.1	0.5	2.9
4. I was disappointed with some aspects of fishing.	7.5	28.8	28.3	26.4	9.0	3.0
5. Fishing was worth the time and money spent to participate.	20.0	56.7	14.8	5.7	2.9	2.1

Q-9. How often did you have an enjoyable fishing trip while fishing in each of the different types of water? (Please circle one response for each type of water)

	<u>MOUNTAIN LAKE</u>	<u>LAKE</u>	<u>RESERVOIR</u>	<u>RIVER</u>	<u>MOUNTAIN STREAM</u>
NEVER	3.4	1.4	3.9	1.4	3.3
SOME OF THE TIME	17.5	23.2	25.7	22.1	15.8
HALF OF THE TIME	5.8	10.1	8.7	10.6	7.2
MOST OF THE TIME	22.3	29.5	33.5	28.8	25.4
ALWAYS	28.2	23.2	18.0	27.4	31.1
I DON'T FISH THESE WATERS	2.8	12.6	10.2	9.6	17.2

Q-10. Below is a list of possible experiences one could have had through fishing. Please tell us how available you found the opportunities for experiencing each in Idaho.

<u>REASONS FOR FISHING</u>	<div> How available did you find opportunities for experiencing each? (Please circle one response for each reason) </div>					MEAN
	NOT AVAILABLE	SOMEWHAT AVAILABLE	MODERATELY AVAILABLE	QUITE AVAILABLE	EXTREMELY AVAILABLE	
1. Developing my fishing skills.	4.4	20.5	19.0	45.9	9.8	3.4
2. Releasing or reducing some built-up tensions while I fished.	2.9	15.6	27.8	44.4	9.3	3.4
3. Being close to nature while I fished.	0.5	5.4	17.1	51.7	25.4	3.9
4. Showing others I could fish.	20.4	26.5	23.5	23.5	6.1	2.7
5. For the stimulation and excitement of fishing.	2.5	14.2	27.5	40.2	15.7	3.5
6. Catching trophy fish.	22.9	33.8	21.9	16.9	4.5	2.5
7. Developing personal spiritual values through fishing.	15.1	25.6	22.1	30.2	7.0	2.9
8. Competing against other anglers.	19.9	33.7	24.0	15.8	6.6	2.6
9. Getting away from the usual demands of life.	1.5	9.8	19.6	46.1	23.0	3.8
10. Catching any fish.	2.9	20.9	33.0	30.1	13.1	3.3

How available did you find opportunities for experiencing each?

(Please circle one response for each reason)

11. Being in natural settings while I fished.	0.5	6.7	16.3	52.2	24.4	3.9
12. Experiencing tranquillity while I fished.	0.5	12.6	21.8	50.5	14.6	3.7
13. Testing my fishing abilities.	4.0	20.3	27.7	38.1	9.9	3.3
14. Filling my daily catch limits.	16.5	40.5	30.0	10.0	3.0	2.4
15. Being on my own while I fished.	11.7	24.4	25.9	30.2	7.8	3.0
16. Sharing what I knew about fishing with others.	13.1	28.6	31.2	22.1	5.0	2.8
17. Being with friends while I fished.	2.0	14.6	23.4	42.4	16.6	3.6
18. Catching different kinds of fish.	6.3	33.2	33.7	19.0	7.8	2.9
<hr/>						
19. Learning more about the river, lake or, stream.	5.9	25.5	26.5	31.4	10.8	3.2
20. Doing something with my family while I fished.	5.3	11.2	22.8	39.8	20.9	3.6
21. Putting meat on the table.	14.2	35.0	28.9	17.3	4.6	2.6
22. Seeing fish jump or rise.	7.4	22.7	29.1	33.0	7.9	3.1
23. Testing and using my fishing equipment.	5.4	17.7	30.5	35.5	10.8	3.3
24. Developing close friendships with my fishing companions.	3.5	16.9	21.4	45.3	12.9	3.5
25. Thinking about my personal values while I fished.	5.4	15.8	20.2	45.8	12.8	3.4
26. Bringing back pleasant memories.	1.5	10.4	24.8	48.0	15.3	3.7
27. Learning more about fish.	5.4	28.4	31.4	27.5	7.4	3.0

Q-11. Now that you do not fish how do you feel about fishing? *(Please check one)*

6.8% NOT MISS IT AT ALL
 10.7 MISS IT A LITTLE
 36.2 MISS IT SOME
 22.6 MISS IT CONSIDERABLY
 23.7 MISS IT A GREAT DEAL

Q-12. How important was catching fish for you? For each of the statements about catching fish please tell us how strongly you agree or disagree?

How do you feel about each statement?
(Please circle one response for each statement)

STATEMENT

	AGREE STRONGLY	AGREE	NEITHER AGREE NOR DISAGREE	DISAGREE	DISAGREE STRONGLY	MEAN
1. A fishing trip was successful to me even if I caught no fish.	16.6	49.8	13.3	19.0	1.4	2.4
2. A successful fishing trip was one in which I caught many fish.	12.0	33.2	29.8	21.2	3.8	2.7
3. When I went fishing I was just as happy if I didn't catch a fish.	9.5	31.8	19.4	36.0	3.3	2.9
4. Keeping the fish I caught was more enjoyable than releasing them.	10.4	28.4	33.2	20.4	7.6	2.9
5. Catching a trophy fish was the biggest reward for me.	6.2	17.7	25.8	35.9	14.4	3.3
6. A full stringer was the best indicator of a good fishing trip.	3.4	23.6	23.6	37.5	12.0	3.3
.....						
7. When I went fishing, I was not satisfied unless I caught at least something.	6.3	35.1	23.1	31.3	4.3	2.9
8. Bringing fish home to the table was an important outcome of fishing.	3.4	19.9	26.2	41.3	9.2	3.3
9. The more fish I caught the happier I was.	5.8	31.1	24.8	31.6	6.8	3.0
10. The bigger the fish I caught, the better the trip.	4.9	34.6	26.8	28.3	5.4	2.9
11. I was just as happy if I didn't keep the fish I caught.	10.7	44.7	19.4	22.3	2.9	2.6
12. I was happiest with a fishing trip when I caught fish that were hard to catch and land.	11.2	51.2	26.8	7.8	2.9	2.4

Now a few questions about why you do not currently fish.

Q-13. To what extent has each of the following been factors that made you give up fishing?

FACTOR	How important has each factor been? (Please circle one response for each factor)					MEAN
	NOT IMPORTANT	SOMEWHAT IMPORTANT	MODERATELY IMPORTANT	QUITE IMPORTANT	EXTREMELY IMPORTANT	
1. The large number of other anglers I ran into while I was out fishing.	31.8	25.3	12.4	20.0	10.6	2.5
2. Not having family or friends to fish with.	45.3	13.5	17.1	17.1	7.1	2.3
3. Not having roadless areas to fish in.	65.3	9.4	14.1	6.5	4.7	1.8
4. The small number of fish I was able to catch.	42.5	20.1	17.2	14.4	5.7	2.2
5. The number of fish I was <u>allowed</u> to harvest.	61.3	17.9	11.6	5.8	3.5	1.7
6. The difficulty of road access.	58.5	14.0	12.9	10.5	4.1	1.9
.....						
7. The size of fish I did catch.	49.4	25.6	15.1	7.6	2.3	1.9
8. Not having the equipment to fish with.	62.0	12.9	9.4	9.9	5.8	1.8
9. Not having the interest to fish.	60.0	17.6	8.8	10.0	3.5	1.8
10. Not having the money to fish.	50.3	19.5	8.9	13.0	8.3	2.1
11. Not having the right fishing skills	66.7	14.3	7.7	6.0	5.4	1.7
12. Not being physically able to fish.	80.0	5.3	2.4	5.9	6.5	1.5
.....						
13. Fishing regulations that were too restrictive.	54.4	15.8	8.2	12.9	8.8	2.1
14. The quality of water.	33.1	17.2	14.2	23.7	11.8	2.6
15. Not being able to use motor boats.	86.7	6.4	3.5	2.9	0.6	1.2
16. Having to fish in waters on which motors were allowed.	59.3	18.0	11.6	5.8	5.2	1.8
17. Not having lakes to fish in.	58.2	15.3	10.6	8.8	7.1	1.9
18. Not having put-and-take waters.	71.9	11.9	8.8	4.4	3.1	1.5

		How important has each factor been? (Please circle one response for each factor)					
19.	Not having designated Wilderness areas to fish in.	59.3	17.4	9.3	9.9	4.1	1.8
20.	Not having a variety of waters in which to have fished.	49.4	19.2	12.8	14.5	4.1	2.0
21.	Not having an area close to home that I could fish.	44.5	19.1	12.7	13.3	10.4	2.3
22.	Having to release my fish.	67.6	11.2	10.0	5.9	5.3	1.7
23.	Not having wild trout streams to fish.	44.8	18.6	11.0	14.0	11.6	2.3
24.	Not knowing how to clean fish.	86.6	3.5	3.5	1.2	5.2	1.3
<hr/>							
25.	Not knowing how to use fishing equipment.	69.6	15.2	5.8	4.1	5.3	1.6
26.	Not knowing how to use a boat.	83.7	7.6	1.7	3.5	3.5	1.4
27.	Not having the time to fish.	22.4	14.4	17.2	21.3	24.7	3.1
28.	Having to handle fish.	88.4	4.7	2.3	1.7	2.9	1.3
29.	Having to handle bait.	88.4	4.0	2.9	1.7	2.9	1.3
30.	Having to be around water.	86.5	4.1	3.5	1.2	4.7	1.3
31.	Not knowing where to fish.	42.2	22.5	16.2	11.6	7.5	2.2
32.	Feeling sorry for fish.	80.3	8.1	8.1	1.7	1.7	1.4
33.	Having to clean my fish.	88.4	4.6	2.9	0.6	3.5	1.3
34.	The amount of time I had to spend away from my family.	70.2	9.9	7.0	8.2	4.7	1.7
35.	The amount of time it took to catch a fish.	55.5	19.1	12.7	5.8	6.9	1.9
36.	Complicated fishing regulations.	46.8	17.3	12.1	12.1	11.6	2.2

- Q-14. Besides fishing, what other outdoor recreation activities (e.g., camping, rock hounding, skiing, etc.) did you participate in when you last fished, and about how many days a year did you participate in each? *(Please write in the name of the activities, and indicate how often you participated in each)*

Nominal list

- Q-15. Are there any activities that you were participating in when you stopped fishing that you now spend more time at than you used to? *(Please write in the name of each activity)*

Nominal list

- Q-16. What new activities, if any have you taken up since you stopped fishing? *(Please write in the name of each activity)*

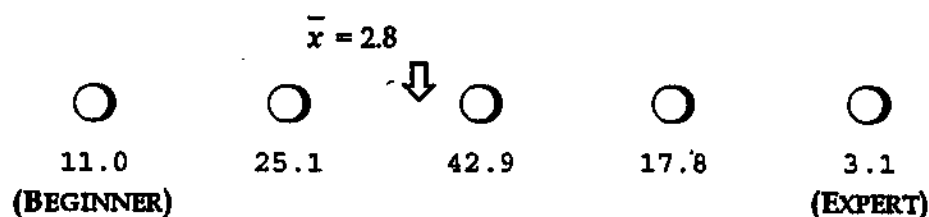
- Q-17. What would it take for you to start fishing again? Please be as specific as you can. *(Please write in your answer below)*

Nominal list

- Q-18. What is your general impression of how well the Idaho Department of Fish and Game is doing its job of managing Idaho's fish resources? *(Please check one)*

5.9%	EXCELLENT
50.5	GOOD
22.1	FAIR
7.8	POOR
4.9	VERY POOR
8.8	NOT SURE

Q-19. How would you rate your expertise as an angler at the time you stopped fishing? (Please check the circle that best represented your skill level)



Finally, some information about you

Q-20. What is your present age? (Please enter number of years)

$\bar{x} = 45.1$ YEARS

Q-21. Are you: (Please check one)

56.8% MALE
43.2% FEMALE

Q-22. What is your present marital status? (Please check one)

MARRIED = 76.1%
SINGLE = 23.9%

Q-23. Did you have any children at the time you stopped fishing? (Please circle one)

38.6% NO ⇨ PLEASE GO TO Q-24.

61.4% YES NUMBER OF CHILDREN; $\bar{x} = 1.5$ CHILDREN

A. How old were your children who lived at home with you when you last fished? (Please write in the age of each child)

OLDEST $\bar{x} = 14.1$ YEARS

5TH OLDEST $\bar{x} = 13.5$

2ND OLDEST $\bar{x} = 12.2$

6TH OLDEST $\bar{x} = 12.5$

3RD OLDEST $\bar{x} = 11.4$

7TH OLDEST $\bar{x} = 0.0$

4TH OLDEST $\bar{x} = 12.1$

8TH OLDEST $\bar{x} = 0.0$

B. How many of your children would you consider to be active anglers today? (Enter number)

PERCENT OF CHILDREN ARE ACTIVE ANGLERS:

0 = 37.0%

3 = 7.9

1 = 30.7

4+ = 4.0

2 = 20.5

Q-24. Are you currently a member of any fishing, conservation, environmental or sportsmen's organizations? (Please check one)

89.4% NO

10.6% YES

If YES, please list:

1. _____

2. _____

3. _____

Q-25. During the year that you stopped fishing were you: (Please check all that apply)

66.7% EMPLOYED FULL-TIME

12.5 RETIRED

11.9 EMPLOYED PART-TIME

11.3 HOMEMAKER

3.0 UNEMPLOYED

7.1 STUDENT

Q-26. During the year that you stopped fishing, how many jobs did you work at? (Please write in your answer below)

I WORKED AT JOBS $\bar{x} = 1.1$ JOBS

We would appreciate your answering the last three questions. If, however, you feel this is a private matter we respect your decision to not answer.

Q-27. Which of the following do you consider yourself? *(Please check one)*

AMERICAN INDIAN OR ALASKAN NATIVE = 1.5%
ASIAN OR PACIFIC ISLANDER = 1.0
BLACK, NOT OF HISPANIC ORIGIN = 0.0

HISPANIC = 1.5
WHITE, NOT OF HISPANIC ORIGIN = 93.5
OTHER = 2.5

Q-28. Which of the following best describes your total family income before taxes in 1992? *(Please check one)*

LESS THAN \$5,000 = 2.7%
\$5,000 - \$9,999 = 6.0
\$10,000 - \$14,999 = 6.6
\$15,000 - \$19,999 = 14.3
\$20,000 - \$24,999 = 9.9
\$25,000 - \$29,000 = 12.1

\$30,000 - \$34,999 = 8.2
\$35,000 - \$39,999 = 8.2
\$40,000 - \$49,999 = 11.0
\$50,000 - \$74,999 = 16.5
\$75,000 - \$100,000 = 3.3
\$100,000 OR MORE = 1.1

Q-29. How many people, including yourself, does this income support? *(Please enter the number of people)*

PEOPLE

First some questions about why you have never fished.

Q-1. To what extent has each of the following kept you from becoming an angler?

FACTOR	How important has each factor been? (Please circle one response for each factor)					MEAN
	NOT IMPORTANT	SOMEWHAT IMPORTANT	MODERATELY IMPORTANT	QUITE IMPORTANT	EXTREMELY IMPORTANT	
1. The large number of other anglers I expect to see while fishing.	44.2	15.4	18.6	14.8	7.0	2.2
2. Not having family or friends to fish with.	41.5	17.5	12.0	17.5	11.4	2.4
3. Not having roadless areas to fish in.	67.1	12.9	10.0	5.6	4.4	1.7
4. The small number of fish I expect to catch.	43.8	14.7	18.2	11.5	11.8	2.3
5. The number of fish I think I will be <u>allowed</u> to catch.	47.8	16.4	15.0	11.7	9.1	2.2
6. The difficulty of road access to fishing areas.	44.8	20.6	15.4	12.2	7.0	2.2
7. The size of fish I expect to catch.	45.7	19.9	17.3	10.6	6.5	2.2
8. Not having the equipment to fish with.	45.6	15.2	13.2	12.9	13.2	2.3
9. Not having the interest to fish.	35.7	13.7	15.2	15.5	19.9	2.7
10. Not having the money to fish.	46.6	16.2	11.2	14.2	11.8	2.3
11. Not having the right fishing skills	44.7	20.8	10.8	14.9	8.8	2.2
12. Not being physically able to fish.	75.7	80.6	3.8	5.9	9.7	1.7
13. Fishing regulations are too restrictive.	50.6	16.6	15.7	9.5	7.7	2.1
14. The quality of water.	30.0	11.2	14.7	20.9	23.2	3.0
15. Not being able to use motor boats.	73.1	11.8	7.7	5.3	2.1	1.5
16. Having to fish in waters on which motors were allowed.	56.9	11.7	12.6	10.0	8.8	2.0
17. Not having lakes to fish in.	54.6	9.3	15.5	10.7	9.9	2.1

FACTOR	How important has each factor been? <i>(Please circle one response for each factor)</i>					MEAN
	NOT IMPORTANT	SOMEWHAT IMPORTANT	MODERATELY IMPORTANT	QUITE IMPORTANT	EXTREMELY IMPORTANT	
18. Not having access to waters that have been stocked with fish.	43.2	21.9	13.9	12.1	8.9	2.2
19. Not having designated Wilderness areas to fish in.	60.2	13.9	10.1	9.2	6.5	1.9
20. Not having access to a variety of waters in which to have fished.	49.5	15.1	15.7	10.9	8.8	2.1
21. Not having an area close to home that I could fish.	47.0	16.0	15.1	13.3	8.6	2.2
22. Having to release my fish.	60.2	9.9	11.1	10.2	8.7	2.0
23. Not having wild trout streams to fish.	44.8	12.5	16.4	15.5	10.7	2.3
24. Not knowing how to clean fish.	74.2	8.6	5.3	7.1	4.7	1.6
25. Not knowing how to use fishing equipment.	59.1	16.0	8.0	12.5	4.5	1.9
26. Not knowing how to use a boat.	72.5	11.0	5.1	6.6	4.8	1.6
27. Not having the time to fish.	28.1	16.9	15.4	22.5	17.2	2.8
28. Having to handle fish.	78.6	6.3	6.5	4.2	4.2	1.5
29. Having to handle bait.	80.7	5.4	4.2	5.1	4.8	1.5
30. Having to be around water.	87.8	6.3	2.7	0.9	2.4	1.2
31. Not knowing where to fish.	38.8	16.5	17.9	15.9	10.9	2.4
32. Feeling sorry for fish.	78.5	7.4	5.9	5.9	2.4	1.5
33. Having to clean my fish.	77.3	6.0	5.1	4.8	6.9	1.6
34. The amount of time I would have to spend away from my family.	61.0	14.1	10.2	9.0	5.7	1.8
35. The amount of time I expect it takes to catch a fish.	54.9	14.6	12.8	11.6	6.0	2.0
36. Complicated fishing regulations.	42.9	16.0	16.6	11.2	13.3	2.4

- Q-2. What outdoor recreation activities (e.g., camping, rock-hounding, skiing, etc.) do you currently participate in, and about how many days each year do you participate in each? (Please write in the name of the activities, and indicate how often you participate in each)

TOP 7 ACTIVITIES (% of responses)						
<u>ACTIVITY (% participation)</u>		<u>DAYS PER YEAR</u>				
		1-3 DAYS	4-10 DAYS	11-20 DAYS	21-30 DAYS	21+ DAYS
1.	CAMPING (25.4%)	17.9	35.3	18.4	9.9	18.5
2.	HUNTING (7.4)	10.1	31.3	25.6	13.7	19.4
3.	HIKING-BACKPACKING (11.7)	14.5	35.5	20.7	9.0	20.4
4.	TRAIL MACHINE-OHV (6.5)	10.9	26.2	21.8	11.9	29.2
5.	RAFTING-BOATING (4.6)	15.4	31.4	21.2	12.8	19.2
6.	FISHING (11.0)	17.2	29.1	19.1	12.6	22.0
7.	SNOW SKIING (10.1)	13.3	37.9	20.5	8.9	19.5
8.	ALL OTHER ACTIVITIES (23.4)	14.5	30.7	18.1	10.6	26.1

- Q-3. What would it take for you to start fishing? Please be as specific as you can. (Please write in your answer below)

- Q-4. How would you rate your current level of interest in fishing? (Please check the circle that best represents your current interest level)

$\bar{x} = 3.4$
↓

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14.9%	10.9	23.5	17.6	33.1
(HIGH)				(LOW)

Finally, some information about you

Q-5. What is your present age? *(Please enter number of years)*

$\bar{x}=48.9$ YEARS

Q-6. Are you: *(Please check one)*

45.3% MALE

54.7% FEMALE

Q-7. What is your present marital status? *(Please check one)*

74.5% MARRIED

25.5% SINGLE

Q-8. Do you have any children? *(Please circle one)*

20.6% NO



PLEASE GO TO Q-9.

79.4% YES

NUMBER OF CHILDREN

$\bar{x}=3.3$ CHILDREN

A. What are the ages of children who live at home with you *(Please write in the age of each child)*

OLDEST $\bar{x}=18.2$ YEARS

5TH OLDEST $\bar{x}=13.7$ YEARS

2ND OLDEST $\bar{x}=17.7$ YEARS

6TH OLDEST $\bar{x}=9.9$ YEARS

3RD OLDEST $\bar{x}=15.6$ YEARS

7TH OLDEST $\bar{x}=9.2$ YEARS

4TH OLDEST $\bar{x}=14.4$ YEARS

8TH OLDEST $\bar{x}=1.0$ YEARS

B. How many of your children would you consider active anglers? *(Please write in the number)*

PERCENT OF CHILDREN WHO ARE ACTIVE ANGLERS:

NONE = 46.7%

1 = 24.3%

2 = 19.6%

3 = 5.4%

4+ = 4.0%

Q-9. Are you a member of any conservation, environmental, or outdoor organizations? *(Check one)*

NO = 87%

YES = 13%

If YES, please list:

1. _____
2. _____
3. _____

Q-10. During 1992 were you: *(Please check all that apply)*

EMPLOYED FULL-TIME	44.2%	RETIRED	24.9%
EMPLOYED PART-TIME	17.0%	HOMEMAKER	17.7%
UNEMPLOYED	3.3%	STUDENT	7.7%

Q-11. How many jobs do you currently work at? *(Please write in the number below)*

I CURRENTLY WORK AT JOBS: $\bar{x} = .9$ JOBS

We would appreciate your answering the last three questions. If, however, you feel this is a private matter we respect your decision to not answer.

Q-12. Which of the following do you consider yourself? *(Please check one)*

AMERICAN INDIAN OR ALASKAN NATIVE = 0.5%	HISPANIC = 3.2%
ASIAN OR PACIFIC ISLANDER = 1.1%	WHITE, NOT OF HISPANIC ORIGIN = 93.9%
BLACK, NOT OF HISPANIC ORIGIN = 0.0%	OTHER = 1.3%

Q-13. Which of the following best describes your total family income before taxes in 1992? *(Please check one)*

4.9%	LESS THAN \$5,000	\$30,000 - \$34,999	13.8
8.3	\$5,000 - \$9,999	\$35,000 - \$39,999	7.7
13.2	\$10,000 - \$14,999	\$40,000 - \$49,999	9.5
10.1	\$15,000 - \$19,999	\$50,000 - \$74,999	11.3
8.6	\$20,000 - \$24,999	\$75,000 - \$100,000	2.1
8.3	\$25,000 - \$29,000	\$100,000 OR MORE	2.1

Q-14. How many people, including yourself, does this income support? *(Please enter the number of people)*

$\bar{x} = 2.8$ PEOPLE

SUMMARY DISTRIBUTIONS OF OPEN COMMENTS

OPEN COMMENTS FROM ACTIVE ANGLERS (Verbatim)

1. Raise the cost of out of state licenses. Thanks for the survey.
2. I enjoy fishing just to get away with mother nature and to be alone with my family. I love to catch enough brook trout to have a nice meal. There is nothing better.
3. Designate more streams and rivers as catch and release trophy areas. Clean the trash fish out of the waterway system. Thanks.
4. My major complaint about the fish and game department is the attitude of their personnel in the field. They are often rude and discourteous as well as giving off the attitude of not want to be bothered.
5. There also seems to be a disheartening trend toward trophy fishing in fish and game managed waters. This discourages the family fishing unit. Except for my granddaughter, I would have trashed this letter for I am a firm believer that these correspondence does little good.
6. My wife and I have a lot of company each year 6 to 10 couples a year. And some have kids. They all love to fish. I just hope that the out of state license increase doesn't keep them from wanting to by the three to ten day licenses and not be able to fish.
7. I very much dislike the way some people disrespect the land and water by polluting with garbage and litter.
8. Too many regulations. The cost of the license is far too expensive. Fish and game officials can turn a pleasurable experience into a negative one without cause.
9. I strongly believe that the management of the fish and game has lost sight of the goal of Idaho's fishing. Over the years I've seen the amount of the size of fish and the bag limits decrease. As fees and wages to the fish and game have increased. Oregon's fish population and size is much greater than Idaho's and they don't even have to try as hard as Idaho does. I've noticed this in the last five years while traveling into Oregon as often as I do. Because of Idaho's greedy outlook for their employee's wages and management salaries, I probably fish Oregon and Canada more than I do Idaho. It's a good thing I'm not in Mr. Conley's position! There would be some major changes made to increase the fish population in Idaho and put out great state back on top as one of the best states in the northwest to fish! But, as any state office, they don't ask the little guy about anything, nor do they try!
10. With the severe fire burns of 1992, you had better put extra efforts into reseedling and reforesting to avoid continuing dirt/mud runoffs into the mountain streams, rivers etc.
11. How about stocking vs. native issue? Personally, I don't Salmon/Steelhead fish, but any of my co-workers do. Many of them are disappointed in the survival rate of these species due to dams mostly. When the federal government says that dams are of no significant impact is a joke.

12. I think that there will need to be more restrictive regulations on catch limits on blue ribbon streams near our larger population centers. As our population grows, I think that the opportunity to be able to catch trout in a stream or river reasonably near Boise or other large towns, must be protected. I would like to see more streams and rivers selected for the catch and release regulations. I would like to see more streams with sustained wild trout populations.
13. Let us use our state and back country roads and streams. We don't destroy the outdoors. Now that we could use the outdoors it's all locked up and the roads are locked or dug out so retired people can't get to them for recreation. People from other states have no business making the rules for our wilderness and the size of them.
14. Henry's Lake should be designated a trophy lake (1 fish > 5#s) After July 1 since fish are not edible. (Strong moss taste) after that date.
15. I really enjoy being able to take advantage of the excellent fishing that Idaho still has to offer, (Unlike some other states.) I realized that fish management has to take place, I just don't want to see Idaho become overwhelmed with too many rules and regulations. Where it is more of a pain in the butt to go on an enjoyable fishing trip. Other states have already become victims to that type of poor management and Idaho is too pristine and wild for that to happen to. Hope I've been of some help and I appreciate what you're all about. Thanks.
16. We must fight to keep our waters and environment clean and pure, protecting our wildlife.
17. They put Salmon and Pike in Coeur d'Alene Lake and now the dock fishing for kokanee is just about over. Then they put catfish and Pike in Fernan Lake and kind of loused up trout fishing from the shore. They put catfish in Cocolalla lake and loused up the trout fishing again. I would like to see some of our trout lakes left as TROUT lakes.
18. More catch and release for fly fisherman in big fish waters.
19. I feel that Idaho should take a more native role in warm water fisheries. I.E. perch, bass, crappie. Many retired folks can not fish in the dead of winter for trout and pursue warm water fish as most do. I hear this complaint a lot. Structure, planting is a must. Bass clubs have been helpful with money's for fish rearing, and habitats but it's the job of the Idaho Fish and Game.
20. Fishing in Idaho. Less fishing water. Access to public water is getting more and more difficult. Fishing regulations are so complicated it becomes discouraging to be a part of the program. "Trophy" fishing is now in complete control. I believed the fish and game department is more focused upon serving special interest groups rather than serving the needs of the majority. Example, is the fly fisherman. I feel I was almost forced to fly fishing especially if I had any desire to fish blue ribbon water. Not enough emphasis placed upon habitat development--water quality.
21. I would like to see less emphasis placed on trout. More money spent on stocking programs for the warm water species. Catfish, crappie, bass, walleye, perch, sturgeon.
22. I feel a lot of dollars, time, and energy is spent behind desks and not enough field checking done on stream quality. Poor water problems and fish/aquatic life etc. Which need not be hurt, is being hurt because of poor observation of places such as stagnate, to

potato plants. I also leer for what happens as a result of farming and use of various poisons. But, in the process of control of these areas we should beware of stepping upon the small owner/operators who are not damaging, yet get squashed by regulations. I feel I can say this, for I lost over \$15,000 potential income in 1992 because of regulations which came to accomplish laws which should have been taken care of by field work.

23. Save the salmon runs if possible! I think it would be a good investment at any cost.
24. I was raised on Saxton Fruit Farm near Lake Lowell. IN the late 50's and early 60's fishing was at it's top. The reason was that cattle grazing was allowed on the lake, which in turn kept the weeds down. This in turn allowed a natural spawning grounds for the fish in the willows. It also allowed you to fish the willows for up to 8 and 10 pound bass. There never was pollution from he cattle as was claimed. I would also like to see a 1 day and 3 day set aside for nonresident at a low fee. I would also like to see less factory fish in our waters. Take a lesson from Montana. They should be given a hand.
25. Would like to see catch and release only during poor steelhead runs on the entire river (Salmon). L.C. Felton, Box 787 challis Id 83226
26. I don not believe in saving a species of fish. If it is going to cause a hardship upon the human race. This goes for spotted owls, snails, etc.
27. Coming from western Montana where the rivers are only muddy during the spring runoff. It is very disheartening to see the snake river stay muddy all summer and fall. That is the only draw back to fishing. To fish in waters that you know should be clear. Maybe some attention should be paid to cleaning up irrigation waters before being dumped straight into the rivers.
28. I would prefer to have more "Single" waters and more "Catch and release" only waters. A trophy trout lake with this designation would be nice.
29. No more wilderness or parks, more public access.
30. Catch and release only for lake trout in the Payette lake! Will improve quality of fishing experiences.
31. I wonder what it was like before us white folks showed up?
32. I would like to see more bass and crappie introduction in reservoirs. I would also like to see larger rivers managed for year round trout fishing. I would also like to see some waters managed for large fish with one or two fish limits.
33. I strongly disapprove of the dependence on hatchery supplementation in substitution for conscientious preservation of wild fish stocks. and continued weakening of the gene pool of the wild fish through wild fish trapping and hatchery "Gene pollution." I support catch and release regulations.
34. Make it harder for out-of-state people to fish in Idaho.
35. Stop the handling of smolts especially the salmon smolts, get them into the open mesh barges at the input of the snake or Clearwater rivers at lower granite reservoir. Float at normal (Not ram) speed to below Bonneville and release in good flow. Accepted; Redfish lake sockeye are endangered. Where did the other 13 go? Frederick G. Erland, p.o.box 376 new meadows, ID, 83654

36. You made many references to competing with other anglers, I hope you realize this entails, fishing, not parking, camping, boat access, or fishing spots. It is definitely becoming a problem in Idaho. Bring a 40 year native of Idaho I have become extremely concerned about these problems. P.S. I filled this on my lunch hour and did not have time to consult my word spell please forgive and misspelling and my penmanship.
37. Simply catching a fish, and fish, is not important to me. Retaining as my indigenous fishing as possible is. I would like to fish the lochsaw river and keep a limit of 10 to 21lbs. cutthroat trout like my uncles used to do. Of course this is not realistic in the face of ever increasing numbers of fisherman. In fact, with the current catch and release regulations the lochsaw is being fished out just as it was years ago. More enforcement of catch and release regulations will allow more fishing opportunities as they existed historically. This is important to me even if I release every fish I catch. More education of sportsmanlike attitudes are important and equally important is strong birth control ethic. There are just too many fisherman and more being born everyday.
38. Please protect and improve steelhead and Salmon runs. These natural phenomena are much more important than low electric or food prices. Once they are gone, they cannot be reestablished. No more Dams.
39. of my fishing is for steelhead in the Salmon river.
40. Please work on habitat conservation instead of manipulating wildlife numbers.
41. The fish and game department is spending way too much money for so called "experts" to do studies on fish and wildlife. Instead of this, they could better use the money for stocking more fish and controlling lawbreakers.
42. We don't need any more wilderness lands in Idaho, we have enough already. The wilderness lands we do have now are used very little by people of Idaho who live right there. Very few people are going to hike into lakes, rivers, streams or pay to be taken there by an outfitter who is making a living off of wilderness lands. ENOUGH!!
43. I simply feel blessed to have been raised in such a wonderful area of such a fabulous state!
44. I think you are introducing new species into waters that already have a possibility of being a good fishery. An example is the introduction of bass into elk river reservoir. Take experience for many while a good population of reproducing brook trout offered a challenge to those who wanted a different experience. Since the introduction of the bass about 4 years ago, the brook trout population had been steadily decreasing. the bass may not be the whole problem but they do compete for the same minnows and hiding places. The neglect of the brook trout spawning areas is probably the most important cause of the brook trout decline. I am sure there are other brook trout areas that are at risk, in fact I could mention at least 2, but I think elk river reservoir is the major example.
45. I believe that the future of Idaho fishing will depend on management of fish and water quality. Farmers and ranchers pollute more water in Idaho than industry ever will. They also tie up many miles of streams that should be open to fishing. I don't understand why we are so hard on industry but don't even ask farmers and ranchers to reduce pollution. I don't dislike farmers and ranchers, I just don't understand the double standard.
46. I would like to see more opportunity for warm water species (Bass, walleye, etc..)

47. I would really like to see more walleye in reservoirs in Southern Idaho.
48. Let out native American Indians fish with spears only not with "Gill frits". Make the section below the middle fork of the Salmon river a "catch and release" area only. I would like to see the river channels leading into reservoirs "Closed" during spawning season to protect what few spawners there are. Get our Salmon runs back so they "White" man can fish (Even if it is only catch and release.
49. I feel the department is doing a good job, but no one, not even fish and game offices can read the regulations. I fish every other weekend all year long and 80% of the time I don not know if I ma really legal. How easy do you think the every day Idaho fisherman can figure out (Catch and release) from cow creek to middle fork, keep 2 from long creek to rapid river, hatchery fish only downstream to bird river and 1 only over 18" using only natural bait upstream to the head of somewhere Idaho. Get the point? Jerry, 208-452-4534
50. I think there are too many Mexicans. and they are taking over. Andy they drink and are rude and they shoot guns were there is no shooting zones. And they litter. In short they will screw it up for the rest of us.
51. Why is it we have the best cleanest water in the nation and some of the poorest fishing around?
52. There seems to be no way to stop the slobs that take away the fun we once had in the field, and the rope of the resource when no one is around that can do anything about it. I guess that's progress.
53. I love to fish in mountain streams and lakes in the Boudoir and Warren areas. I am hopeful that when the season is open on the secesh river more trout will be planted to upgrade the fishing. It is a beautiful river to fish and enjoy. Also California lake is a beautiful way to spend a day.
54. I think Idaho has a tremendous amount of fishing opportunities. However I believe there should be more catch and release areas. I also believe that put and take consumers too much of the fish and gave budget. Limits should be reduced. Slot limits are a great idea but should be expanded to cover larger stretches of stream and rivers. I don't think keeping fish is wrong or bad, it just cost so much to provide that many fish to the Keepers for the small price they pay for the opportunities.
55. I would like to see a lot less emphasis on Trout (Not steelhead). Very few Idahoans I know really enjoy catching finless hatchery trout. That just skip across the water when you reel them in. I and many others would like to see money and time put into bigger game fish. I.E. Bass, walleye, salmon, steelhead. Thank you for your time, I'm willing to answer any more questions you may have. Feel free to call me, Jari Priddy, Box 16 New meadows, 347-2511
56. A major concern is our steelhead and salmon fishing. I lived to see abundant runs depleted to little or nothing. The pressure from modern civilization had pressed out the natural runs. A person like myself must consider the large expense nowadays, compared to the real value of the fishing for these type of fish. Much of my time and money is now spent on horse packing to back lakes in Yellowstone park and Wyoming. Because of the beauty of the trip and the abundance of fish, of which I release anyway.

57. The mountain streams in the Clearwater county stinks. There are no fish worth keeping to put on the table. If there was I'd fish more and know of others as well. The streams have plenty of food and no fish.
58. Generally speaking, it sucks most of the time. the best barometer of success is the tracks of the fish truck. Trout are no the only desired fish.
59. Yes, one thing worries me some. That my grandchildren won't see salmon and steelhead fishing in future years, unless the people of Idaho can't face the act about the way the dams on the snake river system had damaged the fishing. Why can't they spend the time and money to build a by pass stream up along the reservoirs pass the slack waters and suitable ladders past the dams to let the ocean run fish still use our river system. Think about this!! I have fished in Idaho since 1957.
60. I've only lived in Idaho for 4 years. Before my family and I moved here, my wife never fished per say, until we came to Idaho. Now in the past 3 and 1/2 years, I do believe she loves to fish more than I do. We're not a trophy fishing family. In fact, we're more interested in perch, crappie, bluegill, or walleye. WE would like to know more about the panfish fishery here in Idaho. But seems nobody want to even acknowledge that it exists. So, how about giving the panfish an even break and quit keying on the trout or bass. Thanks and keep up the good work.
61. I think that you let the Sun Valley type people influence your decisions too much. Scott logan, Mackay Idaho.
62. To whom it may concern, I feel that too little is being done about the salmon populations here, and out of state.
63. Having mountain streams stocked with fish is more often than they do now.
64. Special interest groups (Fly fisherman) are spoiling the fishing for families. By restricting the way people can fish in certain rivers. With these restrictions families with young children are limited as to where they can fish. It is running family fishing trips. The south fork of the Boise river used to be an excellent place for family fishing. Now about all you see fishing there are a few men from Boise and Oregon. I would like to see the South fork returned to the families of Idaho for bait fishing and camping.
65. Work more on different fish species that would suite waters near large communities. I.E. Catfish in middle snake. Best possible fish for a given body of water.
66. Drawdowns kill fish--just walk the banks and you will see the truth in this statement.
67. There are too many hydroplants moving in some of our most beautiful areas. I hate it and would be willing to help do something about it. Support bass.
68. While trophy trout fishing is my personal favorite fishing , I feel more pan fish and bass fishing should be made available in southern Idaho. In my opinion fish management is practiced mostly from Twin Falls North and West. South eastern Idaho is managed to attract Utah fisherman and their needs. Out of state fee's are more important than size or quantity or quality. This applies to hunting and fishing in this end of the state.
69. While I do enjoy fresh fish to eat while camping etc.I do not mind releasing some fish. I think a person should be able to keep a couple to eat. Also it is extremely hard to tell a 3 or 4 years old grandson that he has to release the fish he has just caught.

70. The most important thing to me is to help insure that my children have the opportunities to fish, hunt, and enjoy what God has put on this earth for us to enjoy. I haven't been able to do everything that I have every wanted and my will be able too, but I've done enough to know that I want my kids to be able to experience what I have if they choose to.
71. Another very important thing to me is to make every person that hunts, fishes, camps out or sees the wilderness is able to see it without seeing trash. I think it needs to be stressed to everybody not to litter when there out in the wilderness and that if they do see trash be willing to pick it up and carry it out. Even (1) little candy wrapper makes a difference. Unfortunately there are people who don't carry out what they carry in, so it's important to pick up the slack where needed. If you see them litter, politely let them know how important it is to carry it out. Let's give our children and their children an opportunity to see what we have as God made it.
72. Fish hatcheries (Cabinet Gorge) appear to be ineffective...very few breeding tanks/facilities appear productive. Lake Pend Oreille fishery is definitely deteriorating. More and more "Locals" are traveling to Montana for quality fishing. Is there a particular reason why streams are not planted, to provide some degree of success for fly fishermen?
73. I enjoy fishing a great deal, one thing I would like to see is a more simple fishing regulations the way it is now you need a tape measure and a secretary to figure out if you're legal in legal water, using legal tackle, and legal bait. I feel the regulations turn many away because they can't understand whether they are legally fishing a certain stream or not.
74. I am a power plant operator. After I became an operator and always on the river, I have lost considerable interest in fishing.
75. Most of the fishing I do is in conjunction with horse packing trips in the mountains. It's nice to be able to keep a couple of fish to eat in camp even in the wilderness areas. I seldom bring fish home from this type of area. On occasion I will stop along a road and catch a few fish for some older people who can't get out anymore. I do not eat fish at home. Size of the fish to me is not as important as having a lot of bites. I lose interest fast in there are few fish. Usually take at least one or I sight seeing trips in Owyhee Co. Most of these streams are polluted with trash fish. Very few trout. Don't know if there is any feasible answer for this.
76. As I think most of this is due to easy migration of squaw fish from Owyhee reservoir. Don't think there is much of anything interesting in this area as it is quite remote. I've talked to Henry C. on the call in show about this and he said it was possible to treat this with squaloxin (Kills only squawlike fish) but that it's quite expensive. I have also been concerned about some of the bear valley streams. (Corduroy meadows in particular) it has been catch and release for a couple of years and there seems to be no recovery of the trout. I realize this was mainly a Salmon spawning ground. Haven't gotten any definite answer from biologist on this. The upper streams still have gravel bottoms even though some of the larger streams are silted up in this area. Think by and large fish and game is doing a very good job as it's pretty tough with the angling pressure and diverse interest these days. Jim Porter H.C. 79 Box 111c Melba Idaho 83641.

77. The 12" length on bass on Brownlee R. Should be reduced to 10" or 11". I have found that there are a lot of 10"-11" fish, but not a great number over 12" length. Keep up the good work.
78. Please help teach the public in the conservation aspects of fishing. Also littering is a huge problem in Teton county. I always pack-out lots of garbage when I fish and then the next time I'm there, there's lots of garbage there again.
79. I am for minimum stream flow, I saw the snake river go dry and walked on the dry stream bed on 5-92, we are not all farmers.
80. Keep working on the salmon steelhead problem.
81. Charge out of state fisherman more money!
82. In Southern Idaho, after seven years of drought, we are or will be very lucky if there is any fisheries remaining. For instance, Magic Reservoir has been practically dry for almost all of those years. This used to be a terrific place to fish.
83. Hopefully with the increased precipitation this winter many of these fisheries will recover.
84. Overall, I believe fishing in Idaho is varied and exciting. In the amount of time I have been fishing however, 2 things have been bothering me. #1, shrinking take limits on trout, they have gone from 10 to 6 in my lifetime. How low does it go? #2, the increase in anglers. It is very hard to enjoy a fishing experience shoulder to shoulder on most fishing trips. One upside to this, so many more people are fishing that it becomes very hard many times to catch 6 fish anyway.
85. Have you read the fishing regulations? It's a joke, you don't know if one can fish in that area or not. Or can one use bait in that area or not. Is it keep or release here. Can I use a barbed hook or not. What size hook can I have? The Idaho fishing regulations are not understandable. It just does not make sense. A person must spend hours reading regulations that no one can figure out.
86. We need more catch and release on Idaho's rivers and lakes.
87. Fish and game needs to concentrate on water's that will remain full over winter. In southern Idaho, Milner should be built up in fish population. So should minidoka dam. Although I hear small mouth bass has been planted at Milner dam. It's about time.
88. I have lived in Idaho for 16 years, fished Alaska, Montana and Oregon. Just about anywhere you go the fish and game officers are more friendly and treat you nicer than what they do in Idaho. Trophy fish aren't important to me, I like smaller fish for eating. Perch, crappies, cat fish, are all better than trout, although do like a good mess of trout now and then.
89. As sportsman we must be aware of the unsightliness that liter causes to other sportsman and the public in general. Stiffer penalties and a greater public awareness may help limit the amount of liter seen along our waterways.
90. I would like to see the reservoir levels and river levels to be higher. I'm referring to Dworshack Reservoir, Clearwater river, snake river, and the chain lakes. Dworshack was supposed to be kept full of water and not used as much for power but fore recreation. But, it's not being used that way.

91. I believe that there is too much concentration on saving all the fish in every body of water and every stream. And, less and less consideration to the public who just want to go fishing. No every stream is an endangered stream and had to be saved from the general public.
92. Please develop Dworshak reservoir to include Walleye, bluegill, crappie, northern perch. You've missed the boat here by not doing this. Need some fish put into the snake river system, I wouldn't waste my time on your damn steelhead.
93. There isn't but one thing better than fishing, and I've caught my limit of wives.
94. Quit letting the Indians gill net. No wonder there aren't any salmon that return up the Columbia river.
95. I consider myself very lucky being an Idahoan and hopefully will always be able to hunt and fish in my state. I'm glad I could help with this survey and I will do whatever I can to help Idaho be a greater place for everyone else. Thanks, Phillip Marc Sanderson.
96. Releasing some species of fish is very important. e.g., bass, wild trout, wild steelhead. Keeping some species is very important to me to eat. e.g., crappie, bluegill, perch. Reduce bag limits on bass, trout etc. It is a necessity in most areas. Laws should permit an angler to keep some fish to eat or for a trophy in all but the most over fished areas.
97. I moved to Idaho from Minnesota 1 year ago. I have done a lot of fishing here in a very short time. Fishing has been good from small mouth bass and trout. The mountain lakes and streams are great. The reservoirs are good. The drought scares me about the reservoirs. They can't take much more. I think fishing quality in some reservoirs had gone down. Also, launching boats is a nightmare in some of them. One thing I really miss is catching a variety of fish like walleye pike, northern pike and largemouth bass. It would be nice if some lakes around Boise area could be stocked with these 3 fish. Another thing that would be nice for fishing would be some good lake maps. They should include depth, contour lines, rock reefs, weeds, springs, incoming rivers, launches and what type of fish are in the lake. Thanks for listening to what I have to say.
98. I would like to see less emphasis on hatchery raised through fishing in Idaho. And more emphasis on warm water fisheries. (I.E. bass, crappie, wall-eyed pike.)
99. Obviously we need more fish and game officers patrolling the waters. I am 23 and have loved to fish since I was 4. I have been checked only a few times in the hundreds of days I've been fishing. We need more catch and release fly fishing only waters. (Reservoirs, lakes and rivers.) We need more officers writing tickets for littering (Bait and beer cans) and we need more officers checking for people using bait in single barbless areas.
100. We also need to significantly raise out of state fishing and hunting license prices. Idaho is the premier state for hunting and fishing and every year I see more and more Utah and California people here (Very irritating). Give me an option on our tax return to donate to fish and game and I, as well as others will donate. Sincerely scott serrano.
101. A lot of the reservoirs in southeastern Idaho go close to dry or dry completely every couple of years so we loose many fish. My suggestion is to dredge to reservoirs deeper to allow at least more of the warm water fish to survive. Also I would like to see the length limits go up to 22 inches in Danials and 24-mile reservoirs.

102. Redo the dams for fish ladders like McNary on Bonneville.
103. I'd like to see more large mouth bass fishing. Also it would seem to me there should be some way of simplifying the fishing regulations so you don't have to be a lawyer to understand them.
104. We would appreciate it if you would dedicate part of your programs to planting larger fish in the rivers.
105. It bothers me that they have proposed to stop recreational boating on some mountain lakes. (Redfish for example) A fish cannot return to its' natural habitat if the fish aren't there to return. If there is a boating problem I would think you ought to stop boating on the fishes spawning passages.
106. I love to fish for salmon and steelhead I think sometimes I should be done to protect and bring back Idaho's salmon population to a stable numbers. This is a must.
107. We need more local ponds for bass catch and release fishing in the treasure valley. Fish and game needs to acquire more warm water fisheries in this area. More emphasis on bass rather than trout.
108. Fish that are restocked from one lake to another should be checked for pepper grubs. Bluegills were put into Dawson lake that are loaded with them.
109. Protect the quality wild trout waters from degradation by siltation and pollution.
110. Provide more good bass fishing in low land small man made lakes for early and late season action.
111. I believe the fish and game should make a study on what effect the draw down to save the salmon has on warm water fish. (Crappie, bass, catfish.) These fish all spawn in shallow water I think we we'll lose more than we gain.
112. I really enjoy fishing the Boise and Snake rivers.
113. Fish limit would be appreciated in most areas.
114. Great fishing, I just need to do more of it.
115. The fish and game need to construct more gravel spawning beds in both streams and reservoirs below the water. There are no fish in any of the Payette river branches because of the moving granite which does not allow any foot to stay in and under the rock. Check dam's below rust water elevations need to be constructed. Black canyon Reservoir didn't fill full of sand because of clean water. All of the boat ramps should have been extended during these past dry years. Hauling excess steel head to the Boise River had been excellent. Man can help mother nature if he tries.
116. Would like to fish for salmon again.
117. During the summertime, when school is out we spend a lot of time along the Payette below Banks and fishing in most areas really sucks. Maybe you can stock it at least once a year. Do a survey on hunting and trapping!!

OPEN COMMENTS FROM INACTIVE ANGLERS (Verbatim)

1. When I was a child we fished streams, for years the fishing was excellent. I'm sorry my children never got to experience this aspect of fishing as fishing was very poor whenever we went stream fishing. Also I really hate to see lakes poisoned all in the name of trophy fishing, I feel it can be a dangerous practice. I like to see small limits in back country lakes except when it comes to lakes with large numbers of Brookies- I would like to see no limit or a very large limit on these, instead of poisoning them to control this species. I really enjoy cut throat fishing! Also would enjoy seeing more Dolly Vardon in the streams. Also no offense but your questions were not very pertinent as far as I was concerned.
2. I used to fish and had a combination licence for 1987-had a lousy time so quit.
3. I did fish up to 50 days a year, spent from 20-3- days a year steelhead fishing. Do not keep fish, except 1 a year for smoking. People pressure on the streams, are too high. Just count the beer & pop cans on parts of the streams.
4. I fished to get away from people so if there's people there, I move on to another area. There are areas on the Salmon, where I've fished for 20 years- and to find out- of-state people enjoying themselves- littering the area-doesn't set too well. Fishing fish is a limited resource- you can fish the streams with thousands of people- and still have fish- What it costs to go fishing- it's not cheap to go - so fishing for meat is not the prime reason for going- Thus more catch and release areas are mandatory- so fish have fun-and leave them for the next person.
5. I believe fishing in Idaho could rival the best bass lake in Florida. In order to preserve this, I believe that all natural water sources should be catch and release only. The state's stocking programs give people plenty of table fare from our reservoirs. I think our natural fish population to be nearly a sacred thing that people think is endless. I'm not one of these white collar fly fishing purists either, However I do see the importance of catch & release. We have something here that is too good to waste.
6. Living on a farm does not co-exist very well with fishing. Hunting is a more practical sport for the busy time bracket.
7. After retiring & moving to town- the fishing time was more available.
8. I enjoy!! I love the outdoors.
9. Right now Idaho's uncontrolled growth population is ruining our state and the outdoor activities are a part of it. Idaho needs to come out of the 1950 where its laws, fines for breaking laws are concerned. It's already getting bad and in 7-10 years all of Idaho's great outdoor areas will be ruined and over run and at this time no one seems to care as long as they are making MONEY.
10. Please keep in mind that the cost of going fishing is not simply the cost of the license. There is also gas, bait, food and camping fees.
11. I suppose if we had a lot of time like a retired person and had some good consistent fishing waters where we could catch trout or perch very close then we might be able to justify the cost of licenses for my husband and myself. But as it is the close fishing is in

the Snake R. for catfish which we aren't particularly fond of catching or eating out of the Snake R.

12. As it is we stand to go in the hole quite a bit financially every time we go camping and the cost of fishing licenses is just too much more.
13. I have been Dredging rivers in S.W. Idaho 3 to 4 months a year for the last 5 years. I have noticed, as have other dredgers, that aquatic life has improved. in areas that have been dredged. (more and larger fish). Not only in the year that dredging has been done but for 2-3 years after. I strongly disagree with Fish and Games policy of protecting rivers from suction dredging.
14. I think this Questioner needs some revision in its thinking.
15. Fish and Game needs to become alot more active in protecting environment! Work to stop clearcutting- Force Forest Service to do watershed repair! Challenge the timber industry on how they manage their lands. Work to make the state forest Practice's act more protective of steams and rivers.
16. I think you need to be more careful when you select people to question to make sure they fit the catagory. I am still an active fisherman and plan to be for many years to come.
17. I would like to see more Fish and Game and Conservation Officers patrolling on the water for crowd control, and fishing and safety violators. We have noticed and applaud the increased safety checks done at the beginning of each year.
18. Due to the general public's lack of respect and consideration for a property owner's "back yard", access to much of Idaho's best fishing has become inaccessible. The Fish and Game in the Swan Valley area is totally unresponsive to illegal guides and doesn't seem to care much about fishing in general.
19. Its the greatest show in earth.
20. I would like to know why F&G doesn't stock the other lakes at Magerman a swell as they used to - And why no one does more beautification around the strike dam and the cove areas- for camping beaches-
21. Like at Lucky Peak and Arrow Rock Reservoirs.
22. At the present time I still fish and plan on fishing for yrs. to come. My wife fishes, my 2 oldes children fish, and I fish and will also teach my new son of 16 months to also fish. What a great outdoor activity to participate in for family and also for self.
23. Regulations too complicated.
24. Fishing in Idaho is non-existent for a parent or grand parent who wish to enjoy a weekend with small children. Fly fishing organizations have been very good at getting the F and G to close more and more water to bait fishing. We have a cabin at Atlanta Ida and can't even fish unless you use artificial lures. I don't mind not catching trophy fish the childrens grandchildren want some action not wall mountings. The last straw was two yrs ago at deadwood res. The river above was beautiful but not a single fish. Then I found out it was blocked where it went into the res. I talked to the F&G personel and asked them where we could find a stream in a area of 60 miles that may have some fish. After several minutes of discussions, map reading and regulation reading it was

determined that there was no place to fish. I am completely disgusted with the G&G regulations. Fly fishing organizations run the fishing dept and the rest of us unorganized individuals are lost in the shuffle. Please open up water for ordinary people.

25. Too many Drinkers sometime
26. Too many small kids running around unattended.
27. I like to fish in Idaho but the rivers have too many snags in them and they have too much moss in the rivers which causes problems when you try to reel your fishing pole in and causes you to lose too many fish and the cost of the license is too high.
28. Stocking more reservoirs with fish would help. For one black canyon reservoir with trout and perch. They are a very good eating fish.
29. If they want to save the fishing in the Kootenai River, they need to have a more natural regulation of water from the Libby Dam! In other words in the Spring, when the run off would be prominent, release more water. In the Summer hold back more water. Being a scuba diver, I can tell you, the eggs that the fish lay on the sand bars and gravel bars will not hatch if there is unnatural atmospheric pressure on them. Even if they are still under water. I could go on in more detail, but it won't do any good!
30. I love fishing in North Idaho- I was born here! But the lakes are becoming all private owned. And hard to get a boat on!
31. the few accesses are hard to use and to find a place to park!
32. I'm retired and on Disability and I have a disability license to fish and hunt on, free disable permit to hunt and fish.
33. I don't think much of the management at Henery's Lake.
34. Idaho is a very beautiful place to fish in. There are lots of places to fish in our area.(Mini-Cassia) Let's try to keep it as natural as possible and preserve our wildlife.
35. I really enjoy fishing and plan to fish again. I have a granddaughter thats 8 yrs. Came up to visit last summer and all she wanted was to catch a fish. It was fun watching her face. And I also just plain like to fish but my priority now is playing golf. Hope this helps.
36. Except for WWII I lived in Idaho, all my life. Trout are the fish in Idaho, so why are you planting fish in Idaho which many of us concider trash fish? IE. Blue-gill, Bass Etc.
37. I still fish every chance I get. I have my 1993 senior license already and plan to fish every time I can.
38. The main reason I stopped fishing was I found myself almost totally focused on the experience to fishing - oblivious to the subtleties of the environment - the mountains, water, the flora and fauna.
39. So I put down my pole and started exploring the landscape. Sometimes I miss fishing but somehow I manage to not buy the license and gather the gear. I also really believe in catch and release- just about everywhere, anytime and that changes my basic attitude about fishing.

40. My chief complaint is too many people have discovered all those "private" fishing spots of mine and Idaho is just getting too crowded. I'm spending more of my time in the Owhyee's and eastern Oregon and northern Nevada.
41. More catch and release fisheries should be established.
42. Unfortunately, there are not enough law enforcement personnel to monitor illegal activities.
43. I don't feel that wild trout should be kept. I think we are depleting the populations.
44. The daily limit should be reduced in some waters.
45. I will probably begin to bait fish/lure fish more (not fly fish) this summer because my boys are getting old enough to take them out.
46. In fact, I do plan to start fishing again this year as the kids are not at a good age to appreciate it, and I will have a little more free time.
47. I haven't tried very hard to find it, but I do think "easy access" places to fish should be further developed and informational brochures should be printed and available at F and G offices.
48. Right now, my primary fishing needs are finding places where I can go with two young sons. I need to sunny day, a flat dry band to sit on, a pool free of brush (so the kids won't snag all the time), and an occasional willing fish to catch. (Most of all, I need the time to do it, or to make the time.
49. Specifically, I could use a brochure with a title something like: "Kid's fishing holes in SW Idaho."
50. Overall, I think F and G is doing an excellent job.
51. -PLEASE READ THIS-
52. It seems to me that the Idaho Fish and Game thinks that everyone in this state loves to fish for trout. I DO NOT- yes they are fun to catch- but as far as table fare YECK!
53. A nice bunch of perch or a 5 bass limit of 12" bass is and excellent meal. Even sunfish or blue gills are very good eating.
54. Don't get me wrong, I like to catch 5-6 lb hybreads at Henrys lake but I let them go.
55. A 12" limit on bass is a very good law, but to grow a 18-20" bass in Idaho is a joke! It takes years and farmers rule on the reservoir water. It's a joke!
56. I'm sorry but I'm affraid it the truth.
57. I haven't stopped fishing, I just stopped fishing for the winter because it sucks because its too cold. Know am getting back into fishing with the warmer weather.
58. How did you incorrectly decide that I had stopped fishing? Please drop me a card- Here's a 19ct stamped card for answer.
59. I never stopped fishing- I've fished since I was 2- so has my son. The only thing I think is you should stock larger (as well as 10-12") and more fish around Boise. There are too many anglers for the amount of fish

60. I did not stop fishing - I moved. Id. fishing is great. However stronger action needs to be taken on people who leave their trash along the streams and rivers.
61. Would appreciate crappie and perch in the lakes around Moscow.
62. My husband and I were fishing in a stream somewhere in Hagermann a few years ago. We caught fish that had black meat.
63. We've had a hard time finding fish.
64. When I was a youngster, you could catch trout in the Snake River.
65. Today that is almost impossible. At least in the area of the Snake River that I live in now.
66. I would like to see Walleye introduced to more fishing areas.
67. Idaho has unparalleled mountain lake fishing. I'm not sure why I recieved this survey. I bought a fishing liscense last year. The only other comment I want to make is that most of the controls I've witnessed semmed to make sense. The only one that doesn't is the rare instance in which you are not allowed to keep even one fish out of a certain stream; ie. catch and release only.
68. Keep Idaho's fish and wild game for Idahoneans not out of state sportsman. Keep out fish and wild game animals in Idaho.
69. I lived in Stanley, Idaho for three years and am currently living in Challis Id. I worked in Stanley during the summers, the height of the tourist season and I think that I have never had to deal with so many exceptionally rude and selfish people. I knew personally of people who, while fishing, let their children throw rocks and cross the fence and actually chase the cattle pastured in lower Stanley. People who littered the banks of the river with garbage, and on one occasion, a man at the side of HWY 75 near lower Stanley changing his clothes while cars drove by - He was completely nude. I'm not a crackpot - I'm just sick of catering to these people to come and play while mining and ranching are being oppressed. We pay the taxes!!
70. I like Idaho's open spaces and I like the access available to most places. I can appreciate that we need wilderness areas that aren't as accessable. I love primitive back country in its splendor and natural beauty. I quit hunting five years ago but love to see big game and take pictures of them in their natural habitat. To fish is a relaxing get away from experience. But I love catch and release. Occasionally I keep a few just to eat immediately. I mostly love being outdoors.
71. I fish mainly Mt. Lakes I love fishing with my wife and family at times.
72. Being in the mountains with the beautiful created lakes which God has created, I fill his holy presence all around. Christ is the Enhancer of all things. After all he created all things! Christ stands at the door of your heart and knocks, please let him in.
73. Hi!
74. Its a way of life to me- Also too many access roads are being built- The ATV's are not my favorite thing. But Idaho is wonderful as it is. Why promote it?
75. Yes, your survey is too long, and a bit confusing. I steelhead fish in the fall and spring. We should protect the water as much as possible so my kids will know what a steelhead

is in another 20 years. Tell the F&G guys to lighten up a bit. A course on personalle interaction would go a long ways.

76. Many anglers during the summer months use white corn chumming and daily go over the legal limit of silvers (Spirit Lake).
77. Many boaters and ice fisherman foul the lakes with human waste, trash debris etc. Too many large out-board motors and in board foul small lakes. Should be a hoarse power limit on small lakes. Say 25.
78. Idaho provides lots of scenery of varied nature. While I have only lived in Idaho seven years, I have enjoyed fishing a number of times with my brother on various visits previously. It is always a thrill to hook a fish regardless of its size. Of coarse landing it and putting it in the pan put the fishing tougher on the occasion.
79. This survey doesn't fit me. Because of my marriage, you assume I am not fishing because of a name change. I still fish.
80. Some answers didn't apply to me. Because I've never not fished. I do hope I've helped in some way.
81. Its not important to me to catch fish. If I catch fish its O.K. and its O.K. if I don't. The important thing is just getting out with friends and family or just by yourself.
82. After all the worst day fishing is a whole lot better than the best day at work.
83. Fishing is tops of all recreational activities in the state. Believe it is important to preserve our game fish in the sense that we will always have their sport to partake of. Believe it is ridiculous to sacrifice jobs and livelihoods to save one species of fish. Our conservationists need to get their heads out of the clouds and find practical solutions to any problem in maintaining our resources instead of coming up with some of these "Pie in the sky solutions".
84. I fish mainly in the fall for steelhead. I fished for them for nearly 35 yrs and get tremendous enjoyment whether I catch fish or not. My wife is a fairly active person when fishing and we both enjoy the serenety and the beauty of the waters that we fish. Mainly the Salmon and Clearwater Rivers.
85. We all know the natural steelhead is on the decline and I strongly believe that the lower dams and gillnetting are strongly responsible.
86. Fishing is great. My priorities have changed to golf at the moment.
87. I never did completely give up fishing, but I have been real disappointed the last several years.
88. I really enjoyed fishing alot, but when your raising a family and buy hunting, fishing, and game stamps and tags it gets to expensive.
89. Also I got tired to every where you went you were fighting crowds to get down to fish. I like taking off with my family and getting away from all of the people.
90. I especially liked to know that the lakes were stocked with fish when we hiked to them.

91. We knew the fish were there and the challenge was the skill in catching them. I love the area around McCall, Stanley Basin and northern Idaho where we now live. Its a pleasure not to worry about rattlesnakes.
92. You keep talking about when I gave up fishing, I did not give it up. I fish all summer. I buy a license every year.
93. I bought a fishing license for 1993 and am now fishing again. I have new fly fishing equipment and am looking forward to summer.

OPEN COMMENTS FROM NON ANGLERS (Verbatim)

1. I do not fish anymore, my health does not permit it.
2. The attitude of some of the fish and game employees.
3. Yes I would like to know were you got my name, how you selected your partisupents. I never bought a license so how did you get to me?
4. Lake low is just two miles from our home it would be nice to have trout in it instead of catfish and carp.
5. I think the Fish and Game Dept is spending their money on computers, office help and radios and pickups and not getting fish in the streams so there is something to catch when you go fishing.
6. My last several fishing trips have been float trys (by rubber boat) down the Madison and Yellowstone Rivers in Montana. No crowd, peaceful & F=Quiet.
7. Thanks
8. When I was a kid my father and grandfather took me fishing many times. By the time I was old enough to fish on my own there were already too many people fishing. Where ever we would go there were already people there and not fast and few people but many people. I lost interest in fishing because it was no longer a chance to get away.
9. Do not believe it necessary for any more wilderness areas in Idaho.
10. Thanks a lot
11. Would like to get involved in fishing, but the number of fish your allowed to catch isn't worth it. The money I spent on a fishing boat is a waste of money. I would also like to know of more places to fish at.
12. Being from southern Idaho I have sadly watched the Snake River turn GREEN! Something has to be done before this wonderful waterway chokes!!
13. big deal killing a fish
14. More roadless areas. We need to protect the wilderness, not open it up to a bunch of people who will litter, abuse and take advantage of it.
15. Good time doing this.
16. I know this information is important for you to do your survey so I filled it out and sent it. I haven't lived in Idaho now though for 2-2.5 years. I go to Idaho often and get out of state fishing licences when I do go fishing. I hope I didn't mess up your survey!
17. Now that we have water please stock streams.
18. My husband who has been dead 13 years was an avid fisherman. Time from work was limited so his opportunities were limited. He didn't like the taste of fish, just the sport.
19. Need more docks and places to launch boats.
20. I don't give a fuck about fish or fishing. Don't waste your postage again!

21. I stopped fishing, because the regulations got so complicated. You couldn't tell if you were in catch and release areas, weather barbless or not. Etc. I believe in catch and release. But I think the rules need to be made much simpler.
22. Have better fishing areas for older and disabled residents.
23. Get the government out, Let nature run its course.
24. I would like to see more emphasis on maintaining native species through habitat management as opposed to raising fish and stocking waters.
25. I have fished in the past and plan to fish much more in the future but with hobbies and workload I haven't taken the time to plan after retirement.
26. I fished, hunted, rocks, birds, and big game. Had four wheel drive from 1955 to 1982. Camper, tent and all.
27. Just keep good work up. Do not like to see out of staters taking over.
28. I am friends with a 74 year old man who has lived in North Idaho for most of his life. He is a very active fisherman. He supplements his food supply with fish that he catches. He is always complaining to me about how he can not walk in to his old fishing streams as they have all been closed to fishing. He does not fish the lakes, only the streams, as he hates the taste of big fish.
29. We should have some stream areas open to the old fashioned angler, even if just for our older citizens who could not afford all the new modern gadgets required for lake fishing. They have the time to fish if there were places to do it.
30. No, because I have only read and talked to some, and most are elderly or past 60 years. When I was not a widow, we traveled yearly by coach, camper, and other transportation. Including horseback, writing letters and stories. I was a teacher in three states. Love the mountains, streams, and travel. Every summer for over 30 years, we traveled. My husband was a cancer naval man. Traveled some in bordering countries and many states in USA.
31. It's sure nice to see the sock eye saved. Maybe it's a bit late but it sure would be a nice statement about man's ability to balance his/her needs with the needs of nature or our environment.
32. Yes?
33. I feel that F and G is doing a fine job with the limitations that is placed on them.
34. I was born and brought up in the Big Lost River valley where Rainbows abound. Used to at any rate. There was always good fishing in the river but in my growing up years the reservoir 4 miles above Mackay was closed to fishing, so I never had the pleasure of fishing in it. About the time I left the valley and moved to Texas, (about 1939), the reservoir was declared open for fishing. After I retired in 1976 we moved back to the valley I had a chance to try my luck in the reservoir. I and a couple of my friends would go up about five times a week. The limit as I remember was five fish. We never failed to get it. This went on for about seven years, then started tapering off. Not long afterward the reservoir was opened to fishing all the year around. From then on it was all down hill for me as far as fishing in the valley was concerned. I didn't give up easily and spent four or five hours many times on the dam getting a few bites and once in a while a fish.

The big red meated fish I was used to was gone and when you did catch a fish it was usually a "planter". I have long since burned out all desire to fish the reservoir, but at 81 years perhaps I just burned out period.

35. My husband fishes on average of three times a week. The only reason I have not bought a fishing license is because of my two younger children. They don't allow me or any one else enjoy a good fishing trip.
36. I do love fish and can hardly wait for my children to grow up a little more.
37. My experience while living and fishing in Idaho for ten years was very positive. I would recommend fishing Idaho to everyone and know of many people who vacation there for this purpose. We enjoyed the vast selection of different species to fish for although trout was by far our favorite and always caught our limit no matter where we went. We also enjoyed catch and release in some of the wilderness areas. My concerns would be erosion from runoff and possible chemicle pollutants from farming which I suspect is lowering populations in the payette river which has become less popular in the last few years.
38. More stream fishing, with better camping areas.
39. I do not know the regulations.
40. I do not know how to fish very well.
41. My interests are in other things.
42. I have never had much luck when I did fish before, probably not knowing where to go.
43. My son has gone with one of the fish and game officers and could possibly become and active angler.
44. Would love to see small streams have fish like they had in the 60's. (If possible)
45. Get environmental groups out of our western USA.
46. I think the fish limit is quite fair considering all the people that fish. You need to set a limit. I really don't think its fair that the native americans can fish and hunt without a license. Also that they can get all the salmon they want.&Etc
47. Thank you for caring enough to do this. Those SOB's in Fish and game don't care about us.
48. How about a statewide single barbless hook rule for all kinds of fishing. I like the trophy type management such as is used on Henry's Lake. I wouldn't mind seeing it everywhere.
49. This is a good thing to do.
50. Why does this questionnaire assume we don't fish? We go several times a year to minnesota and north Dakota, including ice fishing. Very few things have kept us from fishing if we want to .
51. This is much needed.
52. Dear Wildlife and Range Sciences, thanks.

53. I don't understand the two letters you sent me, please give me more information. I'm 10 years old.
54. Why fish.
55. We eat a lot of fish and hope habitat can maintain and increase fisheries, commercial, and fishing for pleasure. We appreciate the contribution to tourism and Idaho's economy of all outdoor recreation. Maintaining the environment of forest and wildlife for generations to come is extremely important.
56. Keep on trucking.
57. Instead of these stupid letters spend the money on improving the streams and lakes. Some where we can take children to and be safe. So many drunk people around the streams and lakes.
58. I don't fish because I think the agency uses all our money for things that are not important to me, like hunting and such.
59. Your questionaiers asks "why I have never fished?" I just haven't fished in Idaho. The only things holding me back from fishing are lack of time (I'm a student) And lack of knowing as to locations of the types of streams I prefer to fish.
60. More things to do than to whip the water.
61. I used to enjoy fishing a great deal. The cost of the license is to expensive, since I should only be able to get away and fish 5 or 6 times a year. Other than that, I think you are doing an excellent job.
62. I think I met you guys on a river somewhere. Seems like you were doing a survey on boating. Couple of years ago?
63. I support strongly designated wilderness areas, and would like to see the areas so designated expanded in Idaho. Even if I never hike into these areas, it is a comfort to know that they exist. To say nothing of the eco systems that are preserved therin.
64. I do not want to see any more Idaho rivers damed. I support the efforts to save the wild salmon runs, though I realize there is no easy solution to the problem.
65. I would like to see grazing on public lands stopped. The overgrazing at Harrison State Park, and subsequent erosion into the Henry's Fork (to cite only one example) seemed particularly disturbing. Cattle have destroyed and continue to destroy and degrade the environment and wildlife habitat-it should be stopped.
66. Spend less time sitting in an office sending out surveys. Spend more time working in streams improving fish habitat. Also improving and repairing access to lakes. Docks need continuous repair.
67. Sein out the Northern Pike and give them to the needy or poor. Improve the cuthroat fishing which the pike eliminate.
68. Idaho Fish and Game have done a good job with the chinook and improved the Kookani in Lake Couer de Alene.
69. Fisheries is the worst run part of state government. They think they know it all. Not atall like the wildlife people who are real interst in what we want.

70. Just a note to let you know that I have never been a fisherman for most of my 67 years and for the past twenty years in Idaho. In 1992 I did not buy a fishing liscense due to lack of water and several other reasons. I do not understand why I have been selected for this survey. We have property at Magic Res. and do most of our fishing there and I'm sure you know the problem with the water level there the past several years.
71. Were can I fish with out people elbow to elbow?
72. The dams are there! The salmon above the dam were condemned a long time ago.
73. Fish and Game personnel to be advisors, not regulators
74. Regulations to be general and not more that 3 pages long.
75. I was a fisherman, however I did not catch more than 1-2 fish a year.
76. Thanks
77. I enjoy going to the fish hatchery's. I just need more hours in a day so I can go fishing more. Please keep the streams stocked so when I can go fishing I can catch a fish.
78. Keep it up
79. If you want to do the environment a favor, outlaw fishing!
80. Keep our rivers blue
81. Wish you'd stock the South Fork of Boise River between Baumgarner and Abbott Campground more frequently.
82. Kindly let me know what you know after this.
83. Since it has been so long since I have fished regularly I don't really have a lot of knowledge about actual conditions of the different watersheds, but I will make one comment. I think the closer to populated areas a body of water is the more restrictive the regulations should be, such as maybe more creeks going to Idaho city should only be open so many days a year and certain years only for catch and release, and maybe only open to younger children. When if I ever fish again it will be confined to the middle fork of the Boise to Atlanta and its tributaries on a catch and release basis only. I would also teach my boys to follow the same philosophy, unless one had an urge to catch and eat some perch. Otherwise we will get fish to eat at the supermarket
84. Raise fishing fees to 50 -60 bucks a year. more for special fish, make it special, keep the bums out. Sock it to out of staters.
85. My main reason for not being involved in fishing was money but my income would make one wonder why was money a problem. Bills, bills, bills! Major student loans. To compensate I work a bunch of hours so no time is available to fish.
86. I have not fished enough to know enough about fisheries management. I am more oriented toward conservation than artificial manipulation of damaged ecosystems to satisfy macho sportsmen. I have trouble with stocking lakes for fishing rather than for the sake of the fish.
87. thanks

88. When I was a boy, I fished quite often with my father's brother. I have always been pleased with the quality of fishing opportunities in Idaho. I know my family shares this sense of satisfaction. But i juct can not fish with all these people
89. I am glad to help
90. People take our resources for granted. They should be better educated about how fragile the ecosystem is. They should be limited severely on their use of streams, lakes and rivers for recreation until their abusive impact can be brought under control. I favor the intrduction of environmental education courses, modeled after hunter safety courses, before people would be permitted to fish, etc. The public should be made aware that using natural resources is a privilege, not a right, and that our exploding population is going to mandate changes in the frequency and quality of recreation experiences in the future.
91. No place close to home comes to mind so I don't fish
92. We are from Minnesota, we enjoy fishing Northern Pike and Walleye's. If there was a predator fish in lakes it would reduce the amount of very small excess fish. Everyone is afraid that they would take over. I do not believe that this would happen.
93. Appreciate the request
94. I have always loved to fish and I think Idaho is the best. I like trout and steelhead fishing. Fishing Lake Couer de Alene for bluebacks is a favorite pastime for me.
95. Your proposal sounds good. Good luck
96. We would like to see some walleye's planted to get rid of the little perch in Lost Valley Reservoir.
97. Too much money spent on dumb research on fish is not what I want to support. Fishing is a people thing so Im glad you are doing this
98. I've never even thought about it but I'd say you're doing a great job just because I have such high respect for the departments at U of I, also I've visited the fish hatcheries in Hagerman Valley. They are beautiful--just happened to think about the marking of all those young fish--seems just a little overboard but I'm sure you have your reasons.
99. More fish
100. Think you are doing great. You left out a couple of questions that I feel are just as important as some you included. Do I like to eat fish? The answer is no. I do enjoy hearing of others going fishing. My wife and I enjoy our streams and lakes. We do canoe. Most of our activities around water are not compatible with fishing.
101. Yes I dont fish no more.
102. Limit commercial trip boats on the south fork of the Snake River, especially ones from Wyoming.
103. Thank you
104. The main thing is keeping cattle from the streams as this does prevent fish from migrating to the holes. Also please set the limits to a degree that will allow more fish to be taken. I do not like to catch fish and then have to release them. If I were to fish I'd do

it for a meal but you can't make a good meal if you can't catch enough or have to release them. Fish die after being caught and released anyway.

105. Cheers
106. Haven't paid enough attention to the matter to comment effectively, but thank you for your concern.
107. We always enjoy ourselves and see no need to kill
108. Close more roads to make access more difficult to limit the number of fishermen.
109. Hire fewer people so you can spend money on improvements. Stop buying private ground. Encourage use of private areas instead of making everything public. No more Fish and Game lobbyists. Spend the money where it's needed.
110. why all this sudden interest in wild fish. I like to watch fish at dams.
111. Would like to see small marsh estuary closed to fishing and boats on large lakes.
112. Idaho is the best place to live if we all understand each others values
113. Consider more catch and release areas-except for Dolly Varden.
114. Good job
115. Less money spent on salmon. They are going to die off anyway with all the dams on the river. Look at Redfish Lake.
116. This is long over due
117. I recently moved from the east coast and am still confused about what federal/state departments are in charge of what areas.
118. Sorry to see all the problems on Fall River. Not too happy about development(hydro-power) etc, along Idaho's beautiful rivers.
119. I like the way things are being run. I think it is important to advertise what streams are planted so that all visitors know where to catch fish. That way maybe they will leave the natural streams to the natives.
120. I also hope that this brochure in NO WAY supports any environmentalist movement!
121. Keep Utah people away from our reservoir and camping areas so us Idahoans can park our tents and trailers. Please consider covered picnic shelters at Hawkins Reservoir near Downey.
122. Yes I would like to share my feelings on fishing. I have fished on Red River in Elk City also on Crooked River. When the dredge was running on Red River you could fish in the pond as soon as they shut down and catch nice trout and when they weren't running fish could be caught below. Now on Red River the fish enhancement has ruined the fishing, all you can catch is algae and very few fish. The Fish and Game muddied the river below Red River for a week last spring putting in logs to benefit the fish. How? All you can catch now is a few 2-6inch trout and lots of algae Try it sometime. I happen to do mining in the area (hand rock) and like fish. If you don't believe me just talk to the ? up there and see for yourself.

123. Better management of streams and rivers. It is very important that we have catch and release streams and rivers. But they must not let people dredge or pollute our streams and rivers. There should be more management of watershed damage.
124. Idaho is still the finest fishing in the USA. Can our population explosion damage this too soon?
125. I would like to see more artificial non-irrigation impoundments (small lakes or ponds) with easy access for children and older adults stocked with fast, reproductive, good eating, easy to catch pan-fish quality fishing in hand to reach areas (high mountain lakes should be stocked and managed well).
126. Pend o'Reille lake should provide much better fishing as it did years ago. Stream and river fishing has been greatly impeded by silt caused by clear-cutting and over-cutting the forests. So much depends on stopping these two things.
127. I don't think I've recieved any survey before this one. If this survey isn't associated with my name, how did you know I didn't answer the first one? I don't mind filling out surveys, but this is the only one I recieved.
128. First: Where did you get the idea that I had never fished? I bet my wife sicked you on me?? Just kidding.
129. I am 74 years old and have hunted practically all my life.
130. I live on the St. Joe River--have been here 43 years, long enough to see the supply of fish dwindle down to almost nothing because of WWP's control over raising and lowering the water and also because of development and housing projects along the river's banks. So for the past few years I've turned to a number of other hobbies I enjoy, and I leave what few fish are out there for others to enjoy.
131. Southeast Idaho is only used for a vacation spot for Californians to hunt deer. The fishing is very poor, and has not been stocked other than the reservoir for over 20 years. The Fish and Game should be real proud of not only destroying the hunting, but not doing anything to help the fishing.
132. I don't fish because I've never had the time to learn how. When I retire, I hope to learn.
133. I spend as much time as I can in our National Forests, exploring, filming wilderness areas. I believe there is a good job done with the moneys available. It would be nice if we could use our young people in our states program of restocking and things our wilderness needs. Keep up the good work.
134. I would like to see more small streams closed to help our trout spawning to increase our native trout population.
135. I have no comments except to say you are doing all right as far as I'm concerned. If I am a non-fisherman only because I've outgrown it. I'm 82 and not about to change my ways. I have fished Idaho, California and Alaska waters and always enjoyed it.
136. When it comes to personal information, you'll find my comments the nicest you'll get. Do not include them in anymore questions and take me off your list as I have asked before! Now do it!

137. I have lived in Idaho all my life. When I was growing up, my father and mother and I did a lot of fishing. After I married my husband, my sons and daughters did a lot of camping and fishing but my age prevents me to do so. Now my son often comes to Idaho from Nebraska and fishes 3 days.
138. I can only say that Idaho has the most beautiful forests, lakes and streams in the union.
139. My son fishes Redfish Lake, Magic Reservoir and Dear Creek.
140. I would like to have a place to take my grandchildren fishing from a dock, pier or beach and where they would have a better than good chance of catching something larger than a 6-inch trout.
141. On the rare occasions when my husband has time to fish with me, we prefer high mountain streams and lakes.
142. Keep up the good work with raising and stocking fish. Not many native fish left. I caught one in the Mt. Home Reservoir yesterday but he flopped back in. I still have my fish license.
143. I have dealt with the public for years and hear over and over that fishing regulations are too complicated for the average person to understand. Could you simplify the rules.
144. Save the salmon!
145. I don't like to fish. I have moved from Idaho to Oklahoma. The post office in Blackfoot asked me to notify sender of new address. So will do so.
146. Quit building logging roads in the national forests. Quit allowing clearcuts. Control cattle operations along streams (Ex. Feedlots in Salmon Canyon near Riggins). Control agricultural run-off (Ex. Minnesota is a prime example of how unchecked farming operations can foul and kill water quality for fish.
147. Quit trying to manage the fishery by introducing exotic species. Manage the natives only. If you must stock, stock natives. Push for better fish ladders and the dams, less point-source pollution from municipalities and factories. Less non-point pollution from chemically aided farming.
148. It seems to me that they are a big waste of money. They employ so many people whom drive fancy government trucks around and do nothing!
149. I am a bioaide with the eagle hatchery. I used to be an active fisherman but somehow lacked the time to enjoy the sport. Now with this new job in joining the department I hope to do a lot more fishing this year.
150. Are you the same guys who did the black bears thing a few months ago? If so I think this will be the best thing for the state. Thanks.
151. We fished for over 20 years. Every year, we have seen the license sales go up. We have truly become discouraged because we can't see any visible improvements from the monies taken. We love to go to camp around the Big Wood and Baker Creek area. These areas are hardly used but they should also be heavily stocked. Something is dreadfully wrong when more money is demanded for better service but we can't see the effects of money used. Kinda like our taxes-more and more but no better. Fish and Game management needs to scrutinize their efforts more. Sometimes we have noticed they are

deceitful and for their own self gain. We feel they do not have anglers or hunters interests in mind. We know, sometimes its your people in the field, that represent you and your policies that misrepresent the department. We strongly feel some reform is needed. Some loyal support to our native people who live here.

152. Hoping to see some positive improvements for our future years!!!
153. Perhaps this is not what you are looking for, but as the wife of a farmer we are concerned about the water.
154. We are opposed to extreme measures to preserve fish on the Snake River at the expense of water for irrigating purposes. Trout and salmon are great, but far greater effects of some measures there will be on the agricultural scene. Farmers and farm realated business won't be able to afford fishing, etc.!!
155. My husband enjoyed fly fishing. I always went along and he enjoyed the peace and quiet he found.
156. Everyone I talk with says they used to enjoy fishing, but don't go anymore cause its so hard to get a few good fish to eat, and it takes way to long to get a good strike. They also say this about hunting. I guess we are just spoiled for we used to enjoy these sports etc and not have so much regualation and more fishers and hunters than game.
157. We (my daughter and I) went on a 3-day trip in the Loman area to enjoy Idaho's outdoors last spring. I was frightened for our safety the whole time and disgusted to find not other families but scuzzy, dirty, left over hippie types infesting the hot springs (swimming nude) and streams. At one place there were punk types with chains, leather, etc, a mountain of beer cans, and growling dogs obviously camped out in the parking lot.
158. My experience convinced me that Idaho's outdoors is not a safe place for me to take my daughter. It was sad. Since then I have talked with many others who have had the same experience. It would seem the public lands are only for a small portion
159. Voice of the public.
160. Stocking our streams, lakes, etc. has been a boom to fishing and knowing the fisheries, forestry, wildlife people care enough to preserve for future generations. Knowing our heritages will still be here gives warm feelings, and a proudness. In all the efforts that are being done. Thank you.
161. We live in the Couer'd Alene River Drainage and the managment practices in this area make it extremely hard to follow the fishing regulations because of the various seasons, closures, special regulations and we also fish the chain lakes (mostly the lower lakes) and these also have too many different seasons and regulations and closures.
162. From talking to fisherman, I've decided it's not worth the hasel. I enjoy the outdoors every year. I haven't missed hunting for the last forty some years, I own a string of mules and horses and all the equipment just for hunting. I wished you'd spend more money and time on keeping up the trails in the wilderness area (clearwater and selway).
163. I have lived in Idaho for 74 years and fished for 1-2 of those years and enjoyed noe of it, have tangled with the game wardin one time. Got fined 150 for attemptin to snaged

salmon in the salmon river, at Stanley Idaho. Sadly enough Claude Dalos took care of the game warden in later years very sorry. Any day you can't go fishing is a wasted day.

164. It is hard to get to fish from a wheel chair at most places available. I find that ramps that I can fish from are already crowded with a lot of people who are able to fish anywhere. No way are they going to move over for a wheelchair. We have been scouting for a place to fish but so far it's pretty dim.
165. Would I even like to be associated with the people that dreamed this paper up. Shows smart and intellect????????? Does tax money finance such as this?? What a way to perpetuate one's usefulness and importance.
166. These are the stupidest, dumbest questions. Also you are wasting tax payers money on such questions. If you have nothing better to do quit your job and give people more money.
167. Keep up the good work. I have moved to Colorado but hope to return to Idaho soon. We lived in Boise area for 8 yrs. Loved fishing for trout and Kokanee at Anderson Ranch and Deadwood. Cascade needs some help. Fishing here in Colorado is not nearly as good as in Idaho. Also in case you did not notice I do fish.
168. Yes, why does Idaho think that a salmon that comes up the river is a Idaho fish.(salmon)
169. Make rules and regs apply to the Indians as well as everyone else.
170. Hi Nick and Bill. Your buddy, Chris.
171. Love Idaho, its mountains rivers and lakes and wide open spaces. I used to camp out and did some fishing when I was a great deal younger. Just keep everything the same for the generations to come.
172. I just hope you can find a way to manage the fisheries in Idaho that supports tourism and recreation, but that also maintains the natural resources and wildlife that make Idaho so beautiful and appealing!
173. Quit spending tax payers money including license fees trying to make every stream bear fish and put the money where it will do the most good that is in proven fish bearing streams. There are streams in Idaho that probably never have been a viable fish bearing stream, by this I mean produce a catchable fish 6+ inches long and will never be a viable fish bearing stream regardless of what you do to it. I think if you were to make a realistic assessment of all streams that are viable in clubing tributaries and make these streams the best possible everyone would be better off and your public image would receive a big boost. I hope you use this questionnaire to improve the fishing in Idaho if possible and not just scoff at the answers if they don't turn out the way you hoped they would.
174. Being a native of the area, and growing up in the Clark Fork area, I was able to fish with out restriction (people, no trespassing, etc) other than regulations. I feel very strongly that my children be able to do the same. In other words, I want to see the regions lakes, streams to be protected from the harm of the great influx of people into the area. (homes being built on the water, boaters, swimmers, etc.) So that my kids generation can enjoy fishing as well as hunting as much as I have been able to.

175. My husband always bring home fish and find it relaxing after a hard weeks work. He never complains of anything except for the water skiers, he does wish they had areas assigned for their activities other than where others are fishing. Now that the drought is ending he hopes to have a real good year.
176. My knowledge, or rather, lack of knowledge concerning this subject makes it impossible to make any comments.
177. We worry about the popular team growth around Lake Coeur d'Alene and its impact on the wildlife, fish, water-birds etc, as well as on the environment. I am sure these areas will have to be carefully monitored in the coming years. We can only hope decisions will be based on the best approach to management, not persuaded by political pressure.

ID # _____ NAME _____ DATE _____
☐ MALE ☐ FEMALE (Based on name or from voice) TIME _____
 COMPLETED _____

Good evening, I calling from the University of Idaho College of Forestry for
 _____. I'm calling about a survey of fishing in Idaho that we are doing in
 cooperation with Idaho Fish and Game, Could I take about 3 minutes to ask you a few
 questions?

Thanks.

1. When did you start fishing? _____

2. Roughly how many days do you spend fishing each year? Do you fish:

- ☐ 1 - 3 DAYS A YEAR ☐ 4 - 10 DAYS A YEAR ☐ 11 - 20 DAYS A YEAR
☐ 21 - 30 DAYS A YEAR, OR ☐ 31 OR MORE DAYS A YEAR

3. How important is each of these four reasons for fishing in Idaho to you as a reason
 to fish in Idaho. Please tell me if each reason is:

	NOT IMPORTANT,	SOMEWHAT IMPORTANT,	MODERATELY IMPORTANT,	QUITE IMPORTANT, OR	EXTREMELY IMPORTANT
<u>The first reason is:</u>					
Getting away from the usual demands of life.	NOT IMPORTANT	SOMEWHAT IMPORTANT	MODERATELY IMPORTANT	QUITE IMPORTANT	EXTREMELY IMPORTANT
<u>The second reason is:</u>					
Filling my daily catch limits.	NOT IMPORTANT	SOMEWHAT IMPORTANT	MODERATELY IMPORTANT	QUITE IMPORTANT	EXTREMELY IMPORTANT
<u>The third reason is:</u>					
Being with friends while I fish.	NOT IMPORTANT	SOMEWHAT IMPORTANT	MODERATELY IMPORTANT	QUITE IMPORTANT	EXTREMELY IMPORTANT
<u>The fourth reason is:</u>					
Testing and using my fishing equipment.	NOT IMPORTANT	SOMEWHAT IMPORTANT	MODERATELY IMPORTANT	QUITE IMPORTANT	EXTREMELY IMPORTANT

4. If you could not fish how would you feel? would you:

- ☐ NOT MISS IT AT ALL ☐ MISS IT A LITTLE ☐ MISS IT SOME ☐ MISS IT
 CONSIDERABLY, OR WOULD YOU ☐ MISS IT A GREAT DEAL?

- | | NOT
IMPORTANT | SOMEWHAT
IMPORTANT | MODERATELY
IMPORTANT | QUITE
IMPORTANT, OR | EXTREMELY
IMPORTANT |
|---|------------------|-----------------------|-------------------------|------------------------|------------------------|
| <u>The first factor is:</u> | | | | | |
| Having the money to fish. | NOT
IMPORTANT | SOMEWHAT
IMPORTANT | MODERATELY
IMPORTANT | QUITE
IMPORTANT | EXTREMELY
IMPORTANT |
| <u>The second factor is:</u> | | | | | |
| Fishing where I can keep fish
I catch. | NOT
IMPORTANT | SOMEWHAT
IMPORTANT | MODERATELY
IMPORTANT | QUITE
IMPORTANT | EXTREMELY
IMPORTANT |
| <u>The third factor is:</u> | | | | | |
| Fishing a wild trout stream. | NOT
IMPORTANT | SOMEWHAT
IMPORTANT | MODERATELY
IMPORTANT | QUITE
IMPORTANT | EXTREMELY
IMPORTANT |

- ☐ EXCELLENT ☐ GOOD ☐ FAIR ☐ POOR ☐ VERY POOR, OR
☐ NOT SURE

- ○ ○ ○ ○
(BEGINNER) (EXPERT)

9. Are you a member of any fishing, conservation, environmental, or sportsmen's organizations? ☐ NO ☐ YES

IF yes, did you fill it in and return it? YES NO NOT SURE. if NO, why:

A-58

ID # _____ NAME _____ DATE _____
☐ MALE ☐ FEMALE (Based on name or from voice) TIME _____
 COMPLETED _____

Good evening, I calling from the University of Idaho College of Forestry for
 _____. I'm calling about a survey of fishing in Idaho that we are doing in
 cooperation with Idaho Fish and Game, Could I take about 3 minutes to ask you a few
 questions?

Thanks.

1. When did you stop fishing? _____
2. When you did fish, roughly how many days dd you spend fishing each year? Did
 you fish:

☐ 1 - 3 DAYS A YEAR ☐ 4 - 10 DAYS A YEAR ☐ 11 - 20 DAYS A YEAR
☐ 21 - 30 DAYS A YEAR, OR ☐ 31 OR MORE DAYS A YEAR

3. How important was each of these four reasons for fishing in Idaho to you as a
 reason to fish in Idaho. Please tell me if each reason is:

	NOT IMPORTANT,	SOMEWHAT IMPORTANT,	MODERATELY IMPORTANT,	QUITE IMPORTANT, OR	EXTREMELY IMPORTANT
<u>The first reason is:</u>					
Getting away from the usual demands of life.	NOT IMPORTANT	SOMEWHAT IMPORTANT	MODERATELY IMPORTANT	QUITE IMPORTANT	EXTREMELY IMPORTANT
<u>The second reason is:</u>					
Filling your daily catch limits.	NOT IMPORTANT	SOMEWHAT IMPORTANT	MODERATELY IMPORTANT	QUITE IMPORTANT	EXTREMELY IMPORTANT
<u>The third reason is:</u>					
Being with friends while you fish.	NOT IMPORTANT	SOMEWHAT IMPORTANT	MODERATELY IMPORTANT	QUITE IMPORTANT	EXTREMELY IMPORTANT
<u>The fourth reason is:</u>					
Testing and using you fishing equipment.	NOT IMPORTANT	SOMEWHAT IMPORTANT	MODERATELY IMPORTANT	QUITE IMPORTANT	EXTREMELY IMPORTANT

4. How do you feel now that you no longer fish? do you:

☐ NOT MISS IT AT ALL ☐ MISS IT A LITTLE ☐ MISS IT SOME ☐ MISS IT
CONSIDERABLY, OR WOULD YOU ☐ MISS IT A GREAT DEAL?

5. How important was each of these three factors been in you decision to stop fishing? Were they:

NOT IMPORTANT	SOMEWHAT IMPORTANT	MODERATELY IMPORTANT	QUITE IMPORTANT, OR	EXTREMELY IMPORTANT
------------------	-----------------------	-------------------------	------------------------	------------------------

The first factor is:

Not having the money to fish with.	NOT IMPORTANT	SOMEWHAT IMPORTANT	MODERATELY IMPORTANT	QUITE IMPORTANT	EXTREMELY IMPORTANT
------------------------------------	---------------	--------------------	----------------------	-----------------	---------------------

The second factor is:

Not having places where you could keep the fish you caught	NOT IMPORTANT	SOMEWHAT IMPORTANT	MODERATELY IMPORTANT	QUITE IMPORTANT	EXTREMELY IMPORTANT
--	---------------	--------------------	----------------------	-----------------	---------------------

The third factor is:

Not having a wild trout stream to fish in.	NOT IMPORTANT	SOMEWHAT IMPORTANT	MODERATELY IMPORTANT	QUITE IMPORTANT	EXTREMELY IMPORTANT
--	---------------	--------------------	----------------------	-----------------	---------------------

6. What is your general impression of how well the Idaho Department of Fish and Game is doing its job of managing Idaho's fish resources? Is their work:

☐ EXCELLENT ☐ GOOD ☐ FAIR ☐ POOR ☐ VERY POOR, OR
☐ NOT SURE

7. How would you rate your expertise as an angler when you stopped fishing? On a scale of 1 to 5, where 1 is a BEGINNER, and 5 is EXPERT, where would you rate yourself?

☐ (BEGINNER) ☐ ☐ ☐ ☐ (EXPERT)

8. What is your present age? ____ YEARS

9. Are you a member of any fishing, conservation, environmental, or sportsmen's organizations? ☐ NO ☐ YES

Our records show that we mailed you a questionnaire several weeks ago. Do you recall receiving it? YES NO NOT SURE. IF NO I'm sorry your's didn't get to you. It included the above questions you just answered.

IF yes, did you fill it in and return it? YES NO NOT SURE. if NO, why:

THANKS FOR YOUR TIME. GOOD FISHING!

Submitted by:

Nick Sanyal
University of Idaho

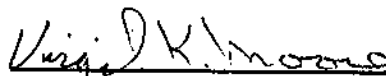
William J. McLaughlin
University of Idaho

Approved by:

IDAHO DEPARTMENT OF FISH AND GAME



Steven M. Huffaker, Chief
Bureau of Fisheries



Virgil K. Moore
Fishery Research Manager